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ABSTRACT

This guidebook provides a combination of guidance and policy information that will help California sponsors to plan, purchase, prepare, and serve nutritious meals and snacks that comply with the Child and Adult Care Food Program (CACFP) meal pattern requirements. Sections 1 through 4 list foods that may be used for the meat/meat alternate, fruit/vegetable, bread/bread alternate, and milk components. Section 5 lists other foods commonly served that do not count toward any component of meal pattern required by CACFP. The sixth section contains examples of how to fill out menu records and use the factors found in sections 1 through 4. Sections 7 and 8 contain information about sanitation and storage and the infant meal pattern. Appendices, included in the final section, contain checklists, records, worksheets, and policy memos. A total of 22 tables and 3 figures are included. (LMI)

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ED 364 994

Simplified Buying Guide

1992 Edition

California Child and Adult Care Food Program

EA 025 540

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Bill Honig, State Superintendent of Public Instruction, Sacramento, 1992

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Simplified Buying Guide

1992 Edition

Prepared by the

Child and Adult Care Food Program Unit

Publishing Information

The 1992 edition of the *Simplified Buying Guide* was prepared by the Child and Adult Care Food Program Unit, California Department of Education. The guide was prepared for photo-offset production by the staff of the Bureau of Publications, California Department of Education, working in cooperation with Karen Brazille, Child Nutrition Consultant, Child and Adult Care Food Program Unit. The artwork was done by Marguerite Wobschall, and the typesetting was done by staff members of the Bureau of Publications.

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Preface

The *Simplified Buying Guide* has been revised to provide a combination of guidance and policy information that will enable sponsors to plan, purchase, prepare, and serve nutritious meals and snacks that comply with the Child and Adult Care Food Program meal pattern requirements.

The guide was originally prepared by Eileen Jensen Herrin, Child Nutrition Consultant, Child Care Food Program Unit, and Debra Dillon Limacher, Child Nutrition Consultant, Field Services Unit. This revised edition was prepared by Karen Brazille, Child Nutrition Consultant, Child and Adult Care Food Program Unit.

We hope that all of you who use this guide will find it of great value while operating your complex programs on a day-to-day basis.

ROBERT AGEE
Deputy Superintendent
Field Services Branch

MARIA BALAKSHIN
Director, Child Nutrition
and Food Distribution Division

ALBERT L. TWELTRIDGE III
Administrator and Assistant Division Director
Child Nutrition and Food Distribution Division

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Introduction

The purpose of the 1992 edition of the *Simplified Buying Guide* is to ensure that adequate amounts of food are planned for, purchased, and served to satisfy **minimum** meal pattern requirements for infants, children, and adults participating in the Child and Adult Care Food Program (CACFP). The meal patterns are designed to provide a well-balanced diet containing a variety of nutrients necessary for children's physical and mental growth and development and adults' health and well-being.

When planning meals, consider the total daily needs of participants. (In this document the term *infants* refers to those children who are ages zero through twelve months, the term *older children* refers to those children who are one through twelve years of age, and the term *adults* refers to individuals eighteen years of age and older.) The combination of meals and snacks you serve will vary according to the ages of the participants and their lengths of stay each day. Remember that the CACFP meal pattern lists minimum quantities required. Older children and adults may need more food. You may serve more food as well as "other foods" (those that do not satisfy a meal pattern requirement but are nutritious).

The *Simplified Buying Guide* is divided into the following sections:

Section 1 lists foods that may be used for the meat/meat alternate component.

Section 2 lists foods that may be used for the fruit/vegetable component. Example: Potatoes are listed in the fruit/vegetable section. Amounts used count toward the fruit/vegetable component and **may not** be used to satisfy the bread/bread alternate component.

Section 3 lists foods that may be used for the bread/bread alternate component.

Section 4 lists the kinds of milk that may be used to satisfy the milk component.

Section 5 lists "other foods" commonly served but not used to count toward any component of meal pattern required by CACFP.

Section 6 contains examples of how to fill out menu records and use the factors found in sections 1 through 4.

Section 7 contains information about sanitation and storage.

Section 8 contains information regarding the infant meal pattern (zero to one year of age) and food components.

Section 9 contains the appendixes.

The *Simplified Buying Guide* takes into account current food production and marketing techniques, packaging methods, and grading standards. Foods are listed in the commonly purchased form; i.e., fresh, canned, or frozen. The notation *servings per purchase unit* means the yield, or edible portion of the food, that is available from the foods after preparation and cooking. The yield factors must be used to determine the correct amounts of food purchased to be sure all children are served the minimum quantities required. Examine the yield factors carefully.

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For this reason recipes and purchasing and preparation guidelines you have developed may need to be recalculated to ensure that meal pattern requirements, based on yields in the 1992 edition of the *Simplified Buying Guide*, are met. Items in the menu planning reference material from reporters 81-13, 81-62, 82-62, 83-12, and 89-112 have been incorporated in this edition of the *Simplified Buying Guide*.

The yield factors contained in this publication are:

1. Based on those in the *Food Buying Guide for Child Nutrition Programs* (United States Department of Agriculture [USDA] Food and Nutrition Service [FNS] Program Aid 1331) for the same types and forms of foods. (Please refer to this guide if more detailed information is desired.)
2. Based on laboratory testing by the Human Nutrition Information Service (formerly Human Nutrition, the Science and Education Administration), U.S. Department of Agriculture (USDA). (The yield factors are also consistent with the standards of the Food Safety and Inspection Service, USDA; the National Marine Fisheries Service, U.S. Department of Commerce; and the Food and Drug Administration, U.S. Department of Health and Human Services.)

This guide will be reviewed periodically. New or revised information will be issued as needed. If you have questions concerning the use of this guide, please contact the Child Nutrition and Food Distribution Division, California Department of Education, 721 Capitol Mall, Sacramento, California (mailing address: P.O. Box 944272, Sacramento, CA 94244-2720); telephone 916-445-0850 or, toll-free, 800-952-5609.

Menu Planning

Good menu planning is the cornerstone of high-quality food service. The menu planner needs to understand the purpose and goals of the CACFP, the meal pattern requirements, and the policies and recommendations related to the meals and food service operation. Menu planning will ensure:

1. Compliance with federal regulations
2. High-quality nutrient content
3. Lower food and labor costs
4. Efficient work scheduling
5. Effective use of equipment and storage
6. Acceptability of the menu

Use this checklist to ensure you have met the program requirements:

1. Have you included all meal components?
2. Have you used the 1992 edition of the *Simplified Buying Guide* to plan serving sizes that will provide all of the eligible children and the program's adults with the required quantities of:
    a. Meat or meat alternates?
    b. Vegetables and/or fruits?
    c. Whole grain or enriched bread or bread alternate?
    d. Fresh, fluid milk?
3. Do your meals include a good balance of:
    a. Color for the food and garnishes?
    b. Texture?
    c. Shape?

    d. Flavor?
    e. Temperature?
4. Have you included whole grain bread/cereal products?
5. Have you included fresh fruits and vegetables?
6. Are most of the foods and food combinations ones your participants have learned to eat?
7. Have you considered participants' cultural, ethnic, and religious food practices?
8. Have you included a popular food in a lunch that includes a so-called new or less popular food?
9. Do you have a plan to introduce new foods?
10. Have you included different kinds or forms of foods (fresh, canned, frozen, or dried)?
11. Have you occasionally included less familiar foods or new methods of preparation?
12. Have you planned festive foods for holidays, birthdays, or special activities?

For menu planning the California Department of Education recommends that you follow the dietary guidelines in the *California Daily Food Guide* (*CDFG*), *Nutrition and Your Health: Dietary Guidelines for Americans*, and the Department's *Meal Quality Self-Assessment Instrument for Child Care Programs*. The purpose of providing specific dietary guidance is to encourage a shift in dietary practices to produce the health benefits that improved nutrition would bring to Californians. Scientific evidence about the associations between diet and health shows that nutrition-related health problems are widespread and that improvements in diet could decrease the extent and costs of major chronic diseases. The long-term benefits of beginning moderate dietary improvements in childhood are immeasurable.

The *CDFG* provides quantitive, life-cycle dietary recommendations. It emphasizes "total diet" and is based on the nutrition principles of balance, variety, and moderation.

Three major concepts for healthier eating are highlighted in the *CDFG*:

- Increasing the number of servings of foods that are high in complex carbohydrates—fruits, vegetables, grains, and legumes
- Choosing low-fat and lean sources of protein, especially meat and dairy products
- Controlling the amount of fat, sodium, sugar, and nonessential foods and beverages (See Table 1 for foods high in these ingredients.)

Fat: The *CDFG* recommends a moderate approach to decreasing total fat: 30–35 percent of calories from fat for children two years of age and older; 30 percent of calories from fat for adults.

Sodium: The *CDFG* recommends moderate sodium levels: no more than 3,300 mg, which requires moderation in the use of processed foods, salty snacks and fast foods, high-sodium seasonings, and salting at the table. The recommended 3,300 mg of sodium is represented in about 1 1/2 teaspoons of salt.

Sugar: The *CDFG*'s recommendations about sugar consumption are general, but both the consistency of sugar-containing food and the frequency of their use contribute to dental caries. Fruit juice–sweetened fruits and baked goods are good alternatives to sugar-sweetened ones.

Table 1

Use of Fat, Sugar, and Salt in Food Preparation

Fat. Various types of fat and oils are frequently used in food preparation. Fat is also a natural component of various foods and is an ingredient in many commercially prepared food items.

Sugar. Various types of sugar or sweeteners are frequently used in food preparation. Sugar and sweeteners are also widely used in many commercially prepared food items.

Salt. Salt contains sodium; sodium is added to foods whenever plain or seasoned salt or seasoning mixes are used. Commercially prepared foods sometimes contain a large amount of salt and other sodium compounds added during processing.

Common Ingredients Used in Food Preparation

Fat	*Sugar*	*Salt*
Beef fat or tallow	Brown sugar, dark	(Sodium-containing ingredients)
Butter	Brown sugar, light	Meat tenderizers
Lard	Brown sugar, liquid	Monosodium glutamate
Margarine	Corn syrup	Seasoning mixes, such as:
Pork fat	Granulated sugar	Salad seasoning
Shortening	Fructose	Taco seasoning
Vegetable oils, such as:	High-fructose	Seasoning salts, such as:
Corn oil	Sucrose	Garlic salt
Peanut oil	Honey	Onion salt
Safflower oil	Maple sugar and syrup	Soy sauce
Soybean oil	Molasses	Table salt
	Powdered sugar	Worcestershire sauce
	Sugar syrups	

Source: *Menu Planning Guide for School Food Service* by Dorothy VanEgmond-Pannell, Patricia Brodeur, and Virginia Wilkening. Washington, D.C.: U.S. Department of Agriculture, 1983. Used with permission.

Menu planners need to include in their meals foods high in vitamin A, vitamin C, and iron daily. Table 2 lists some sources of these nutrients.

Table 2

Some Foods for Vitamin A, Vitamin C, and Iron

Vitamin A—Foods that provide at least 750 IU per 1/4-cup serving

Vegetables
- Broccoli
- Carrots
- Chili peppers (red)
- Kale
- Mixed vegetables
- Peas and carrots
- Pumpkin
- Spinach
- Squash, winter
- Sweet potatoes
- Tomatoes
- Tomato juice, paste, or puree
- Turnip greens
- Vegetable juices

Fruits
- Apricots
- Cantaloupe
- Plums, purple (canned)
- Prunes

Vitamin C—Foods that provide at least 8 mg per 1/4-cup serving

Vegetables
- Asparagus
- Broccoli
- Brussels sprouts
- Cabbage
- Cauliflower
- Chili peppers
- Collards
- Kale
- Okra
- Peppers, sweet
- Potatoes, white
- Spinach
- Sweet potatoes
- Tomatoes
- Tomato juice, paste, or puree
- Turnip greens
- Turnips

Fruits
- Cantaloupe
- Grapefruit
- Grapefruit juice
- Oranges
- Orange juice
- Raspberries
- Strawberries
- Tangerines

Iron—Preparing foods in iron cookware increases the foods' absorbable iron.

Vegetables and fruits that provide at least 0.3 mg of iron per 1/4-cup serving

- Asparagus (canned)
- Beans—green, wax, lima (canned)
- Beets (canned)
- Broccoli
- Brussels sprouts
- Dark green leafy—beet greens, chard, collards, kale, mustard greens, parsley, spinach, turnip greens
- Mixed vegetables
- Peas, green
- Potatoes (canned)
- Sauerkraut (canned)
- Soybeans
- Squash, winter
- Sweet potatoes
- Tomato juice, paste, puree, sauce
- Tomatoes (canned)
- Vegetable juice (canned)
- Apricots (canned)
- Cherries (canned)
- Dried fruits—apples, apricots, currants, dates, figs, peaches, prunes, raisins
- Grapes (canned)

Meat and meat alternates that provide at least 0.5 mg of iron per 1-oz. serving
- Dried beans and peas
- Eggs
- Meat in general, especially liver and other organ meats
- Peanut butter
- Shellfish
- Turkey

Some tree nuts, seeds, and nut butters (See Section 1 for a complete list of acceptable items.)

Bread and bread alternates that provide at least 0.6 mg of iron per serving
- All enriched or whole grain bread and bread alternates

Meal Patterns

Table 3A. (below) presents the CACFP meal patterns for children one through twelve years of age. The amounts of food listed are **minimum** requirements for each age group. Table 17 (page 95) presents the CACFP meal patterns for infants up to one year of age.

Table 3A. Meal Patterns for Older Children (Ages One Through Twelve Years)

Food components	Ages 1 to 3 years	Ages 3 to 6 years	Ages 6 through 12 years
Breakfast:			
1. Milk, fluid	1/2 cup	3/4 cup	1 cup
2. Vegetable, fruit, or full-strength juice	1/4 cup	1/2 cup	1/2 cup
3. Bread and bread alternates (whole grain or enriched):			
Bread	1/2 slice	1/2 slice	1 slice
or cornbread, rolls, muffins, or biscuits	1/2 serving	1/2 serving	1 serving
or cold dry cereal (volume or weight, whichever is less)	1/4 cup **or** 1/3 oz.	1/3 cup **or** 1/2 oz.	3/4 cup **or** 1 oz.
or cooked cereal, pasta, noodle products, or cereal grains	1/4 cup	1/4 cup	1/2 cup
Lunch or Supper:			
1. Milk, fluid	1/2 cup	3/4 cup	1 cup
2. Vegetable and/or fruit (2 or more kinds)	1/4 cup total	1/2 cup total	3/4 cup total
3. Bread and bread alternates (whole grain or enriched):			
Bread	1/2 slice	1/2 slice	1 slice
or cornbread, rolls, muffins, or biscuits	1/2 serving	1/2 serving	1 serving
or cooked cereal, pasta, noodle products, or cereal grains	1/4 cup	1/4 cup	1/2 cup
4. Meat/meat alternates:			
Lean meat, fish, or poultry (edible portion as served)	1 oz.	1-1/2 oz	2 oz.
or cheese or cottage cheese	1 oz.	1-1/2 oz.	2 oz.
or egg	1 egg	1 egg	1 egg
or cooked dry beans or peas*	1/4 cup	3/8 cup	1/2 cup
or peanut butter, soy nut butter, or other nut or seed butters	2 Tbsps.	3 Tbsps.	4 Tbsps.
or peanuts, soy nuts, tree nuts, or seeds**	1/2 oz.***	3/4 oz.***	1 oz.***
or an equivalent quantity of any combination of the above meat/meat alternates			

(Continued)

* In the same meal service, dried beans or dried peas may be used as a meat alternate **or** as a vegetable; however, such use **does not** satisfy the requirement for both components.

** Tree nuts and seeds that may be used as meat alternates are listed in Section 1.

*** No more than 50 percent of the requirement shall be met with nuts or seeds. Nuts or seeds shall be combined with another meat/meat alternate to fulfill the requirement. For the purpose of determining combinations, 1 oz. of nuts or seeds is equal to 1 oz. of cooked lean meat, poultry, or fish.

Table 3A (Continued)

Food components	Ages 1 to 3 years	Ages 3 to 6 years	Ages 6 through 12 years
A.M. or P. M. Supplement (Select 2 of these 4 components.)*			
1. Milk, fluid	1/2 cup	1/2 cup	1 cup
2. Vegetable, fruit, or full-strength juice	1/2 cup	1/2 cup	3/4 cup
3. Bread and bread alternates (whole grain or enriched):			
Bread	1/2 slice	1/2 slice	1 slice
or cornbread, rolls, muffins, or biscuits	1/2 serving	1/2 serving	1 serving
or cold dry cereal (volume or weight, whichever is less)	1/4 cup **or** 1/3 oz.	1/3 cup **or** 1/2 oz.	3/4 cup **or** 1 oz.
or cooked cereal, pasta, noodle products, or cereal grains	1/4 cup	1/4 cup	1/2 cup
4. Meat/meat alternates:			
Lean meat, fish, or poultry (edible portion as served)	1/2 oz.	1/2 oz.	1 oz.
or cheese	1/2 oz.	1/2 oz.	1 oz.
or egg	1/2 egg	1/2 egg	1 egg
or cooked dry beans or peas**	1/8 cup	1/8 cup	1/4 cup
or peanut butter, soy nut butter, or other nut or seed butters	1 Tbsp.	1 Tbsp.	2 Tbsps.
or peanuts, soy nuts, tree nuts, or seeds***	1/2 oz.	1/2 oz.	1 oz.
or yogurt	1/4 cup	1/4 cup	1/2 cup
or an equivalent quantity of any combination of the above meat/meat alternatives			

* Juice may not be served when milk is served as the only other component.

** In the same meal service, dried beans or dried peas may be used as a meat alternate **or** as a vegetable; however, such use does **not** satisfy the requirement for both components.

*** Tree nuts and seeds that may be used as meat alternates are listed in Section 1.

Table 3B. Meal Patterns for Adults

Food components	Adults*
Breakfast:	
1. Milk, fluid (or alternate**)	1 cup***
2. Vegetable, fruit, or full-strength juice	1/2 cup
3. Bread and bread alternates (whole grain or enriched):	
Bread	1 slice
or cornbread, rolls, muffins, or biscuits	1 serving
or cold dry cereal (volume or weight, whichever is less)	3/4 cup **or** 1 oz.
or cooked cereal, pasta, noodle products, or cereal grains	1/2 cup

(Continued)

* Adult participants may be served larger-size portions based on the greater needs of older persons for food, but shall not be served less than the minimum quantities specified for adult participants.

** For adult participants, 8 ounces of yogurt (1 cup), 1 1/2 ounces of natural cheese, or 2 ounces of processed cheese may be substituted to meet the milk requirement. **However, one serving a day must be fluid milk.** When cheese is used to fulfill the dairy requirement, it may **not** be used as a meat alternate at the same meal service.

*** For purposes of the requirements outlined, a cup means a standard measuring cup.

Table 3B (Continued)

Food components	Adults*
Lunch or Supper:	
1. Milk, fluid (or alternate**)	1 cup***
2. Vegetable and/or fruit (2 or more kinds)	3/4 cup total****
3. Bread and bread alternates (whole grain or enriched):	
Bread	1 slice
or cornbread, rolls, muffins, or biscuits	1 serving
or cooked cereal, pasta, noodle products, or cereal grains	1/2 cup
4. Meat/meat alternates:	
Lean meat, fish, or poultry (edible portion as served)	2 oz.
or cheese (or cottage cheese, cheese food, or cheese spread)	2 oz.
or egg	1 egg
or cooked dry beans or peas	1/2 cup
or peanut butter, soy nuts, tree nuts, or seeds	4 Tbsps.
or peanuts, soy nuts, tree nuts, or seeds*****	1 oz.
or an equivalent quantity of any combination of the above meat and meat alternates	
A.M. or P.M. Supplement (Select two of these four components.)	
1. Milk, fluid (or alternate**)	1 cup
2. Vegetable, fruit, or full-strength juice	3/4 cup
3. Bread and bread alternates (whole grain or enriched):	
Bread	1 slice
or cornbread, rolls, muffins, or biscuits	1 serving
or cold dry cereal (volume or weight, whichever is less)	3/4 cup **or** 1 oz.
or cooked cereal, pasta, noodle products, or cereal grains	1/2 cup
4. Meat/ meat alternates:	
Lean meat, fish, or poultry (edible portion as served)	1 oz.
or cheese (or cottage cheese, cheese food, or cheese spread)	1 oz.
or yogurt******	4 oz. or 1/2 cup
or egg	1 egg
or cooked dry beans or peas	1/4 cup
or peanut butter, soy nut butter, or other nut or seed butters	2 Tbsps.
or peanuts, soy nuts, tree nuts, or seeds	1 oz.
or an equivalent quantity of any combination of the above meat/meat alternates	

* Adult participants may be served larger-size portions based on the greater needs of older persons for food, but shall not be served less than the minimum quantities specified for adult participants.

** For adult participants, 8 ounces of yogurt (1 cup), 1 1/2 ounces of natural cheese, or 2 ounces of processed cheese may be substituted to meet the milk requirement. **However, one serving a day must be fluid milk.** When cheese is used to fulfill the dairy requirement, it may **not** be used as a meat alternate at the same meal service.

*** For purposes of the requirements outlined, a cup means a standard measuring cup.

**** Serve two or more kinds of vegetable(s) and/or fruit(s). Full-strength vegetable or fruit juice may be counted to meet not more than one-half of this requirement.

***** Tree nuts and seeds which may be used as meat alternates are listed in the program guide. No more than 50 percent of the requirement shall be met with nuts or seeds except in the case of nut or seed butters which may satisfy 100 percent of the meat alternate. Nuts or seeds shall be combined with another meat/meat alternate to fulfill the requirement. For the purpose of determining combinations, 1 ounce of nuts or seeds is equal to 1 ounce of cooked lean meat, poultry, or fish.

****** Four ounces of yogurt is equivalent to 1 ounce of meat alternate for supplements only. Eight ounces of yogurt may be used as an 8-ounce milk requirement for all meals served, as indicated in ** above, but shall not be used in conjunction with a serving of 4 ounces of yogurt used as a meat alternate in supplemental meals. **Frozen yogurt and other nonstandardized yogurt products may not be used to satisfy the meat component in snacks or the milk component in any meal service. Commercially added fruit or other flavorings may not be used to satisfy any component in any meal service.**

Table 4. Nutrients Provided, by Components

Vitamins and **minerals** for growth and proper body functioning

Protein for growth and building and repair of the body

Fats and **carbohydrates** for energy

No single food contains all of the nutrients in the amounts needed. Therefore, a wise selection of a variety of foods that together will supply these nutrients is very important. The following is a summary of the major nutrient contributions provided by each component.

Major Nutrients Supplied by Each Component

Milk, Fluid	Vegetables and Fruits	Bread and Bread Alternates	Meat and Meat Alternates
Calcium	Vitamin A	B vitamins—thiamin, niacin, riboflavin	Protein
Protein	Vitamin C	Minerals (especially iron)	Iron
Vitamin A	Iron	Fiber	B vitamins—thiamin, riboflavin, niacin, B_6, B_{12}
Vitamin D (if fortified)	Vitamin B_6	Calories	Magnesium
Vitamin B_{12}	Magnesium		Calories
Magnesium	Folacin		
Phosphorus	Other vitamins and minerals		
Riboflavin	Fiber		
Calories	Calories		

Source: *Menu Planning Guide for School Food Service* by Dorothy VanEgmond-Pannell, Patricia Brodeur, and Virginia Wilkening. Washington, D.C.: U.S. Department of Agriculture, 1983. Used with permission.

Table 5

Abbreviations and Symbols

AP	as purchased	**g**	gram	**Tbsp.**	tablespoon
EP	edible portion	**kg**	kilogram	**c.**	cup
cyl.	cylinder	**mg**	milligram	**mL**	millilitre
pkg.	package	**fl.oz.**	fluid ounce	**L**	litre
wt.	weight	**pt.**	pint	**incl.**	including
lb.	pound	**qt.**	quart	**excl.**	excluding
oz.	ounce	**gal.**	gallon	**w/**	with
"	inch	**tsp.**	teaspoon	**w/out**	without

Source: *Food Buying Guide for Child Nutrition Program* by Dorothy W. Davis and others. Washington, D.C.: U.S. Department of Agriculture, 1984. Used with permission.

Table 6

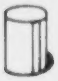
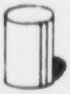
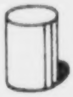
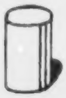
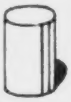
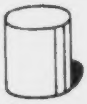
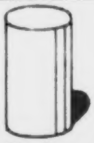
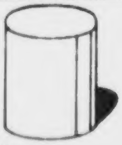
Guide for Substituting Cans

	Can size you have	No. 10	No. 3 Cyl.	No. 2½	No. 2	No. 303
Can size in yield table	**No. 10**	1.0	2.1	3.7	5.3	6.5
	No. 3 Cyl.	0.5	1.0	1.8	2.6	3.1
	No. 2½	0.3	0.6	1.0	1.5	1.8
	No. 2	0.2	0.4	0.7	1.0	1.3
	No. 303	0.2	0.3	0.6	0.8	1.0

Source: *Food Buying Guide for Child Nutrition Program*, by Dorothy W. Davis and others. Washington, D.C.: U.S. Department of Agriculture, 1984.

To use Table 6, find the column with the can size you have. Then, find the row with the can size given in the yield table. The number where the column and row intersect is the required number of cans of the size you have. As an example, you can use 1.5 No. 2 cans in place of each No. 2½ can (see circled number in chart).

Table 7 Common Can and Jar Sizes

Can size (Industry term)*	Average net weight of fluid measure per can**	Average volume per can	Principal products
 **8 oz. can**	8 oz.	1 cup	Ready-to-serve soups, fruits, vegetables
 **No. 1 can**	10-1/2 oz. to 12 oz.	1-1/4 cups	Condensed soups, some fruits, vegetables, meat, fish
 **No. 300 can**	14 oz. to 16 oz. (1 lb.)	1-3/4 cups	Some fruits and meat products
 **No. 303 can**	16 oz. (1 lb.) to 17 oz. (1 lb. 1 oz.)	2 cups	Small cans: fruits and vegetables, some meat and poultry products, ready-to-serve soups
 **No. 2 can**	20 oz. (1 lb. 4 oz.) or 18 fl. oz. (1 pt. 2 fl. oz.)	2-1/2 cups	Juices, ready-to-serve soups, some fruits
 **No. 2-1/2 can**	26 oz. (1 lb. 10 oz.) to 30 oz. (1 lb. 14 oz.)	3-1/2 cups	Family size: fruits, some vegetables
 **No. 3 cylinder**	51 oz. (3 lb. 3 oz.) or 46 fl. oz. (1 qt. 14 fl. oz.)	5-3/4 cups	Condensed soups, some vegetables, meat and poultry products, fruit and vegetable juices
 **No. 10 can**	6 lb. (96 oz.) to 7 lb. 5 oz. (117 oz.)	12 cups to 13-2/3 cups	Institutional size: fruits, vegetables, some other foods

*Can sizes are industry terms and do not necessarily appear on the label.
**The net weight on can or jar labels differs according to the density of the contents.

Source: *Food Buying Guide for Child Nutrition Programs,* by Dorothy W. Davis and others. Washington, D.C.: U.S. Department of Agriculture, 1984.

Table 8

Metric Equivalents

Weight		Volume	
Customary	Metric	Customary	Metric
1 ounce	28.35 grams (g)	**1 cup (8 fl. oz.)**	237 millilitres
4 ounces	113 g	**1 quart**	946 mL
8 ounces	227 g	**1.05 quarts**	1 liter (L)
1 pound (16 oz.)	454 g		
2 pounds	907 g		
2.2 pounds	1 kilogram (kg)		

Source: *Food Buying Guide for Child Nutrition Programs*, by Dorothy W. Davis and others. Washington, D.C.: U.S. Department of Agriculture, 1984. Used with permission.

Since the appointment of the U.S. Metric Board of 1978 by the President of the United States, metric quantities have been increasingly used for food processing, packaging, and in specification writing. Table 8 shows metric equivalents to help you become familiar with the relationship between metric and customary units.

Table 9

Volume Equivalents

1 tablespoon = 3 teaspoons
1/8 cup = 2 tablespoons
1/8 cup = 1 fluid ounce
1/4 cup = 4 tablespoons
1/3 cup = 5-1/3 tablespoons
3/8 cup = 6 tablespoons
1/2 cup = 8 tablespoons
5/8 cup = 10 tablespoons
2/3 cup = 10-2/3 tablespoons
3/4 cup = 12 tablespoons
7/8 cup = 14 tablespoons
1 cup = 16 tablespoons
1/2 pint = 1 cup
1/2 pint = 8 fluid ounces
1 pint = 2 cups
1 quart = 2 pints
1 gallon = 4 quarts
1 pound = 16 ounces

Source: *Food Buying Guide for Child Nutrition Programs*, by Dorothy W. Davis and others. Washington, D.C.: U.S. Department of Agriculture, 1984. Used with permission.

Measures for Portion Control

Scoops or dishers, ladles, and serving spoons of standard sizes are fairly dependable measures for portioning and serving food quickly. To ensure that you get your expected yield, you must take care in portioning.

Scoops or Dishers

You might use scoops or dishers for portioning such foods as drop cookies, muffins, meat patties, and some vegetables and salads. The number on the scoop handle or scraper shows the number of scoopfuls to make 1 quart. Table 10 shows the approximate measure of each scoop or disher in cups, tablespoons, and teaspoons.

Table 10

Scoop and Disher Equivalents

Scoop or disher number	Level measure
6	2/3 cup
8*	1/2 cup
10*	3/8 cup
12*	1/3 cup
16*	1/4 cup
20	3-1/5 tablespoons
24	2-2/3 tablespoons
30*	2-1/5 tablespoons
40	1-3/5 tablespoons
50	3-4/5 teaspoons
60	1 tablespoon

*Commonly used sizes

Source: *Food Buying Guide for Child Nutrition Programs*, by Dorothy W. Davis and others. Washington, D.C.: U.S. Department of Agriculture, 1984. Used with permission.

Ladles

You may use ladles to serve soups, stews, creamed dishes, sauces, gravies, and other similar products. The sizes of ladles shown in Table 11 are the ones most frequently used in serving food.

Table 11

Ladle Equivalents

Number on ladle	Approximate measure
1 ounce	1/8 cup
2 ounce	1/4 cup
4 ounce	1/2 cup
6 ounce	3/4 cup
8 ounce	1 cup
12 ounce	1-1/2 cups

Source: *Food Buying Guide for Child Nutrition Programs*, by Dorothy W. Davis and others. Washington, D.C.: U.S. Department of Agriculture, 1984. Used with permission.

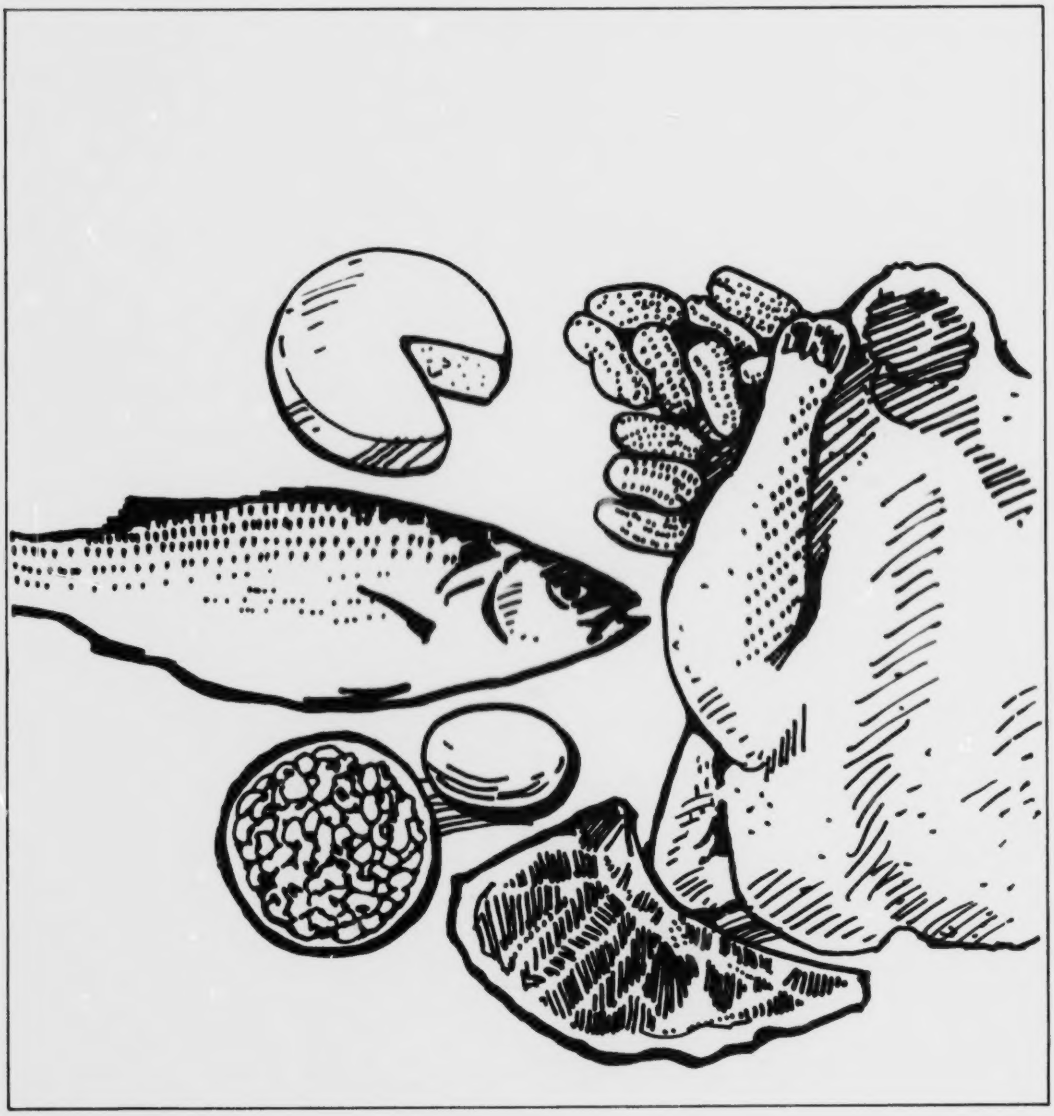
Although the ladles are labeled ounce, they are actually fluid ounce, which is a volume, not a weight, measurement.

Serving Spoons

You may use a serving spoon (solid or perforated) instead of a scoop. Because these spoons are not identified by number, make your own chart that shows the approximate measure of the spoons. Measure or weigh the quantity of food from the various sizes of spoons you use to obtain the number of spoonfuls you will need for the required serving size. Indicate if the spoon is to be filled level, rounded, or heaping.

Section 1

Meat and Meat Alternates



Section 1—Meat and Meat Alternates

CACFP regulations require that each lunch and supper served to older children and adults include the amount of meat or meat alternates shown in the meal patterns in tables 3A (page 6) and 3B (page 7). A meat or meat alternate may be served as one of the two components of an a.m. or p.m. supplement. Meat and meat alternates include meat, poultry, fish, cheese, eggs, yogurt, dry beans, dry peas, some tree nuts, seeds, and nut butters. They provide protein; iron; B vitamins, such as thiamin, riboflavin, and niacin; and other nutrients. Dairy products contain very little iron. Cooking foods in iron pots and/or serving a food high in vitamin C increases the availablility of iron. Remember also:

1. The meat/meat alternate must be served in the main dish or the main dish and another menu item; two items are the maximum number that may be used to fulfill the meat/meat alternate requirement.
   a. Some examples of combinations for satisfying the 1-1/2-oz. meat/meat alternate requirement are as follows:
      1 oz. cooked lean meat + 1/2 oz. cheese
      1 oz. cooked fish + 1/4 egg
      1 oz. cooked lean meat + 1/8 cup cooked dry beans
      1/4 cup cottage cheese + 1/4 egg
      1 oz. cooked poultry + 1 Tbsp. peanut butter
      1/4 cup cooked dry peas + 1/2 oz. cheese
      2 Tbsp. peanut butter + 1/2 oz. cheese + 1/4 oz. sesame seeds
   b. Some examples of combinations for satisfying the 2 oz. meat/meat alternate requirement are as follows:
      1 oz. cooked lean meat + 1 oz. cheese
      1 oz. cooked fish + 1/2 egg
      1 oz. cooked lean meat + 1/4 cup cooked dry beans
      1/4 cup cottage cheese + 1/2 egg
      1-1/2 oz. cooked poultry + 1 Tbsp. peanut butter
      1-1/2 oz. cooked lean meat + 1/2 oz. cheese
      1/4 cup cooked dry peas + 1 oz. cheese
      2 Tbsp. peanut butter + 1 oz. cheese
      1-1/2-oz. cooked chicken + 1/4 oz. walnuts + 1/2 oz. cottage cheese
2. Small amounts (less than 3 tablespoons) of meat or meat alternate used as garnishes or seasoning or in breadings must **not** be counted toward satisfying the meat/meat alternate requirement of the meal. Examples are grated Parmesan cheese used as a garnish over spaghetti or egg used in breading.
3. Vegetable protein products (VPP) may be used as a meat alternate when no more than 30 percent hydrated VPP is mixed with 70 percent uncooked meat, poultry, or fish. For more information see Appendix A.
4. If an item is labeled cheese food or cheese spread, twice the required amount must be served to satisfy the meat alternate requirement. Example: 2 ounces of cheese food provides 1 ounce of meat alternate.

NOTE: Throughout Table 12 the following letter codes are used: (A) = good source of vitamin A; (C) = good source of vitamin C; (I) = good source of iron. Note also that preparing foods in iron cookware increases the foods' absorbable iron.

5. Dry beans and peas may be used as a meat alternate or vegetable, but they may not be credited as both a meat alternate and vegetable in the same meal service.
6. Dry beans and peas may be used to satisfy the meat/meat alternate requirements for infants four to twelve months of age.
7. Allowable tree nuts and seeds may be used to satisfy (1) no more than one-half (50 percent) of the meat alternate requirement for lunch or supper; and (2) all (100 percent) of the meat alternate requirement for supplements.
8. Peanut butter and other nut and seed butters may be used to satisfy all (100 percent) of the meat alternate requirement for lunch, supper, and supplements.
9. Acorns, chestnuts, and coconuts (or their butters) may **not** be used to satisfy the meat alternate requirement.
10. Nut or seed meals or flours may be used as an ingredient in a bread/bread alternate but may not be credited as a meat alternate.
11. A menu item must provide a minimum of 1/4 ounce (0.25 ounce) of meat or meat alternate to count toward the meat/meat alternate requirement.
12. Tofu may not be used to satisfy the meat/meat alternate requirement.

Yields

Quantities of food to purchase and serve are based on average yields **after** preparation and cooking. Yield factors vary by the type of product purchased and the preparation method. Before using commercially prepared products, read the label to determine the amount of meat/meat alternate that may be credited toward satisfying meal requirements. If the label does not provide enough information to determine the amount of meat/meat alternates in a product, write to the manufacturer. Request the specifications to determine how much of the product is needed to meet the meal pattern requirements for CACFP.

Instructions for Using Yield Data

The yield information is presented in the columns numbered 1 through 3 of Table 12, with additional information presented in Column 4:

Column 1, "Food as purchased": Foods are listed in alphabetical order by source; i.e., beef, pork, chicken, and so forth. Other characteristics, such as with or without bone, are given.

Column 2, "Purchase unit": The purchase unit is generally given in pounds or a can size.

Column 3, "Servings per purchase unit": This column shows the number of 1 or 1-1/2 ounce lean meat equivalent servings you will get from each purchase unit **after** preparation. Numbers may be rounded to ensure that enough food is prepared.

Column 4, "Additional yield information."

The following standard, found in column 4, "Additional information," of Table 12, indicates a good source of iron: (I) equals good iron source that provides at least 0.5 mg of iron per 1-oz. serving of meat, poultry, or fish, or 1/4-cup serving of cooked, dry beans or peas.

Examples

Section 6 of this document contains examples of how factors are used to determine how much of the meat/meat alternate is needed to meet meal pattern requirements.

Questions and Answers About Meat and Meat Alternates

The following items are **creditable** as meat and meat alternates:

Beef jerky (See question and answer number 6.)
Canadian bacon
Cheese—natural and processed
Cheese food (See question and answer number 4.)
Cheese spread (See question and answer number 4.)
Corndogs (See question and answer number 9.)
Cottage cheese (A 2-ounce serving, about 1/4 cup, provides 1 ounce of meat alternate.)
Dried beans and peas
Egg custard (Egg may count toward requirement for snacks only.)
Fish sticks (See question and answer number 7.)
Frankfurters (beef, pork, and turkey) (See question and answer number 2.)
Grated Romano and Parmesan cheeses (See question and answer number 1.)
Lunch meat (ham, turkey roll, turkey ham, bologna, and so on)
Luncheon meats (See question and answer number 3.)
Nut and seed butters (almond, cashew, peanut, sesame [tahini], and sunflower) (See question and answer number 11.)
Nuts (almond, Brazil, cashew, hazelnut, macadamia, mixed, peanuts, pecan, pine, pistachio, soybean kernels, and walnut) (See question and answer number 12.)
Refried beans
Ricotta cheese (A 2-ounce serving provides 1 ounce of meat alternate.)
Sausage
Soups—pea or bean (See question and answer number 8.)
Vegetable protein products (VPP) (See question and answer number 5.)
Vienna sausage
Yogurt (for snacks only) (See question and answer number 15.)

The following items are **not creditable** as meat and meat alternates:

Acorns, chestnuts, coconuts, and their butters (See question and answer number 20.)
Baco-bits®
Bacon
Canned soups (See question and answer number 8.)
Cream cheese (See question and answer number 10.)
Meat analogues (100 percent VPP) (e.g., veggie burger, hot dogs, meat strips, and so on)
Nut or seed meals or flours
Pigs' feet and pigs' tails (not recommended because of their low nutrient content)
Powdered cheese in boxed macaroni and cheese (See question and answer number 13.)
***Sizzlelean*® and other bacon substitutes**
Tofu (See question and answer number 14.)

1. Q: **Are grated Romano and Parmesan cheeses creditable in the CACFP?**

   A: Yes. Both grated Romano and Parmesan cheeses are creditable in the CACFP. However, small amounts used as a garnish, seasoning, or in breading must *not* be counted toward satisfying the meat/meat alternate requirement of the meal.

   A 3/8-cup or 6-tablespoon serving provides 1 ounce of cheese (meat alternate) for both Romano and Parmesan cheeses.

2. Q: **How are frankfurters credited in the CACFP?**

   A: Red meat (beef, pork, and so on) and poultry (turkey, chicken) frankfurters that do not contain meat by-products, cereals, binders, or extenders are credited on an ounce-per-ounce basis; that is 1 ounce of product provides 1 ounce of cooked lean meat. Look for products labeled "All Meat," "All Beef," "All Pork," and so on.

   Frankfurters containing meat by-products, cereals, binders, or extenders are **not** credited on an ounce-per-ounce basis. The product name on the label will indicate if the frankfurter contains any of these products.

   To credit frankfurters containing binders and extenders, the institution serving these products must obtain a signed written statement from the manufacturer of such products that states the ounces of cooked or lean meat in the finished product. Only the cooked or lean meat portion of the product may be credited toward the meat/meat alternate requirement.

3. Q: **Is luncheon meat creditable?**

   A: Yes. Luncheon meat is a smoked, cooked sausage. Luncheon meats that do **not** contain meat by-products, cereals, binders, or extenders are creditable on an ounce-per-ounce basis; that is 1 ounce of product provides 1 ounce of cooked lean meat. Look for products labeled with the words "All Meat."

   The contribution of luncheon meats that do contain meat by-products, cereals, binders, or extenders cannot always be determined on the basis of information on the label. Thus, it is recommended that they **not** be served unless a signed written statement from the manufacturer is obtained that states the ounces of cooked lean meat in the finished product. Note: Binders and extenders must always be listed in descending order of their predominance in a product along with the other ingredients.

4. Q: **May Velveeta® and Cheese Whiz® be used?**

   A: Yes. Cheese foods and cheese spreads may be served as meat alternates, but twice as much is needed because these products contain less protein and more moisture than natural and processed cheese. A 2-ounce serving of cheese food or cheese spread is equivalent to only 1 ounce of meat/meat alternate.

5. Q: **May vegetable protein products (VPP) be credited toward the meat/meat alternate component in the CACFP?**

   A: Yes, VPP is allowed as a creditable meat alternate when you mix no more than 30 parts of the fully hydrated VPP, or its equivalent dry weight, with 70 parts uncooked meat, poultry, or fish. The VPP used must comply with either USDA—FNS notice 219 and appear on the approved listing for such products or the USDA—FNS final rules on VPP used in Child Nutrition Programs dated January 7, 1983. These products must have a label stating: "This product meets USDA—FNS requirements for use in satisfying a portion of the meat/meat alternate requirement of the Child Nutrition Programs." (See Appendix A.)

   Institutions may use a commercially prepared meat, poultry, or seafood product combined with VPP to satisfy all or part of the meat/meat alternate requirement if the product bears a label containing the statement:

"This item contains VPP, which is authorized as an alternate food in the Child Nutrition Programs." However, the presence of this label does **not** ensure the proper level of hydration, ratio of substitution, or the amount of the contribution that the product makes toward meal pattern requirements for the CACFP. You still must have proof that there are no more than 30 parts of fully hydrated VPP equivalents combined with 70 parts of uncooked meat, poultry, or fish.

6. Q: **Is beef jerky creditable in the CACFP?**

   A: Beef jerky may be credited; 1 ounce of dried jerky equals 1 ounce of cooked lean meat. Products that are labeled with the following names may be used because they are made with pure beef: beef jerky sausage; beef jerky or natural jerky; beef jerky, sectioned and formed; beef jerky, ground and formed or chopped and formed.

   Products labeled "Beef and soy protein concentrate, ground and formed" would not count toward the meat/meat alternate requirement unless the soy protein met USDA specifications.

   The Child Nutrition and Food Distribution Division cautions against using beef jerky because of its high salt (sodium) content and high cost. In addition, large portions must be served to satisfy the requirement.

7. Q: **May fish sticks be used in the CACFP?**

   A: Fish sticks are a creditable meat/meat alternate. Read labels carefully and compare with the fish sticks entry listed under *Seafood* in Table 12 to determine the correct amount to plan, prepare, and serve.

8. Q: **Are any canned soups creditable toward the meat/meat alternate requirement?**

   A: Most canned soups do not contain enough meat to make a substantial contribution toward the meat requirement. Both bean and pea soup, condensed and ready-to-serve, provide 1/4-cup cooked beans or peas per 1/2-cup reconstituted soup. This is equivalent to 1 ounce of meat alternate.

9. Q: **Are corndogs a creditable meat in the CACFP?**

   A: Yes. Both the frankfurter and breading are creditable in the CACFP. The frankfurter is credited on an ounce-per-ounce basis, excluding the breading. (Refer to meat/meat alternate question and answer number 2.) The breading is credited as cornbread (bread and bread alternates question and answer number 9).

10. Q: **Why is cream cheese not a creditable meat alternate in the CACFP?**

    A: Ounce-per-ounce, cream cheese contains less protein than other creditable cheeses. A serving size that would provide an equivalent quantity of protein would be excessive, especially for preschoolers.

11. Q: **May nut butters be served as an acceptable meat alternate?**

    A: Yes. Peanut butter and other nut and seed butters may be used to satisfy all (100 percent) of the meat alternate for lunch, supper, and supplements.

12. Q: **May nuts and seeds be served as creditable meat alternates?**

    A: Yes. Nuts and seeds that are nutritionally comparable to meat or other meat alternates may be used to satisfy one-half (50 percent) of the meat alternate requirement for lunch or supper and all (100 percent) of the meat alternate requirement for supplements.

13. Q: **May boxed macaroni and cheese be credited in the CACFP?**

A: The macaroni may be credited as a bread alternate if it is enriched. The powdered cheese mix **may not** be credited toward any of the components.

14. Q: **Is tofu a creditable meat alternate?**

A: Currently, tofu is not a creditable meat alternate in the CACFP. Because there is no standard of identity[1] for tofu, the product can vary from one manufacturer to another.

15. Q: **How is yogurt credited in the CACFP?**

A: For older children and adults, 4 ounces of yogurt may be used to fulfill 1 ounce of the meat alternate requirement for snacks only. Only for adults may yogurt also be used as a milk substitute.

16. Q: **May frozen or canned products such as ravioli, pot pies, pizza, meat stew, sloppy joes, and chili mac, be credited in the CACFP?**

A: When these products are credited toward the meat/meat alternate component, the amount of meat and/or meat alternate in the product is the determining factor. Because of the uncertainty of the actual amount of meat/meat alternate in these products, it is recommended they not be used unless (1) they are labeled as a child nutrition (CN) product; or (2) you have a product analysis sheet signed by an official of the manufacturer (not a sales person) stating the amount of cooked lean meat/meat alternate per serving.

To satisfy the USDA meat and poultry product standards for these products, you would need to serve a very large portion or supplement of the meat/meat alternate component when serving any of these products. If not noted on the label or on a manufacturer's product analysis sheet, the following products contain at least the noted percentage of meat:

Meat ravioli—at least 10 percent fresh **uncooked** meat in ravioli

Pot pies—at least 25 percent fresh **uncooked** meat

Pizza—with meat, at least 15 percent fresh **uncooked** meat; with sausage, at least 12 percent sausage (on a cooked basis) or 10 percent dry sausage, such as pepperoni

Meat stew—at least 25 percent fresh **uncooked** meat

Sloppy joes—at least 35 percent meat (on a cooked basis) when labeled with a true product name, "Barbeque Sauce with Beef"

17. Q: **How many meat/meat alternates may be served and credited in a meal?**

A: Meat/meat alternate served as a required component of the lunch and supper meals must be served in the main dish or in the main dish and one other menu item. This means that two menu items are the maximum number that may be used to satisfy the meat/meat alternate requirement. However, both the main dish and the other menu item may contain one or more meat/meat alternate.

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[1] Legal statement of the ingredients required in standard products, such as mayonnaise. Standard products must conform to these listings if they use the standard name (e.g., mayonnaise) on the label.

18. Q: **Are canned cheese sauces allowable in the program (for example, canned nacho cheese sauce)?**

A: To be credited, the product must provide information detailing the actual amount of cheese contained in the product. For example, if a product contains pasteurized processed American cheese, nonfat milk solids, water, spices, and jalapeño peppers, the manufacturer must provide information on the percentage of cheese contained in the product. If the product contains 60 percent cheese, a 2-ounce serving will provide the following: 2 ounces × 60 percent = 1.2 ounces cheese.

19. Q: **Are vegetarian meals allowable for CACFP reimbursement?**

A: Yes. However, the meals still must satisfy the meal pattern requirements. Meat alternates that are creditable in the CACFP toward satisfying the meat requirement include: cheese (natural, processed, cheese foods, and cheese spreads), including cottage cheese and ricotta cheese; eggs; cooked dry beans and peas; some tree nuts, seeds, and nut butters; or any combination of the above. Meat analogues (100 percent vegetable protein products) are not creditable in the CACFP.

20. Q: **Why may acorns, chestnuts, or coconuts not be used to satisfy the meat alternate requirement?**

A: These tree nuts do not have protein or iron levels comparable to other currently approved meat alternates.

21. Q: **Almonds have been classified as fruits. Are they acceptable for this category?**

A: No. USDA classifies almonds as nuts.

22. Q: **May nuts and seeds or nut or seed butters be credited in desserts?**

A: Yes. Because nuts and seeds and nut or seed butters are to be served as any other meat/meat alternate in a main dish or the main dish and one other menu item, the "other" menu item may be a bread, vegetable or fruit dish, or dessert.

23. Q: **Why are some nuts, seeds, and nut or seed butters now being allowed as a meat alternate?**

A: Peanut butter has always been included as a meat alternate in CACFP. Food consumption habits and food preferences are influenced by many cultural, ethnic, economic, religious, and environmental factors and are constantly changing. These changes can affect how foods are used in meals. Nuts and seeds and a variety of nut or seed butters are now playing a more conventional and popular role in meals as, or in, main dish items.

24. Q: **May nuts and seeds in a granola bar be counted toward the meat/meat alternate component?**

A: Yes, if the granola bar contains at least 1/4 ounce of nuts or seeds. If the label does not include this information, you must write to the manufacturer and ask for the list of ingredients and their amounts before serving the item and claiming it for reimbursement.

Table 12. Meat and Meat Alternates

1. Food as purchased	2. Purchase unit	3. Servings per purchase unit		4. Additional information
		1 oz.	1-1/2 oz.	
Meat				
BEEF, FRESH OR FROZEN				
CORNED BEEF BRISKET (w/out bone)	Pound	11.2	7.4	All cuts of beef are good sources of iron.
GROUND BEEF (less than 31% fat—regular)	Pound	11.2	7.4	
(less than 25% fat—lean)	Pound	11.6	7.7	
(less than 10% fat)	Pound	12.1	8.3	
ORGAN MEATS				(I)* Very rich iron source.
Heart	Pound	8.9	5.9	(I)
Kidney	Pound	8.6	5.7	(I)
Liver	Pound	11.2	7.4	(A) (I)
Tripe	Pound	9.28	7.0	(I)
OX TAILS	Pound	4.6	3.0	
ROASTS				(I)
Chuck (w/out bone)	Pound	9.6	6.4	
Chuck (w/bone)	Pound	8.9	5.9	(I)
STEW MEAT	Pound	9.9	6.6	
TONGUE	Pound	9.2	6.1	(I)
BEEF PRODUCTS, CANNED				
BEEF (USDA) CANNED IN NATURAL JUICE	No.2-1/2 can (29 oz.)	14.7	9.8	
BEEF HASH	Pound	5.3		1/3-cup serving = 1 oz. cooked meat and 1/8-cup vegetable
BEEF STEW*	Pound	2.3		3/4-cup serving = 1.2 oz. cooked meat and 1/4-cup vegetable
CHILI CON CARNE*	Pound		2.3	3/4 cup serving = 1.8 oz. cooked meat

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*Yield based on the use of raw beef with a maximum of 30 percent fat.

NOTE: Throughout this table the following letter codes are used: (A) = good source of vitamin A; (C) = good source of vitamin C; and (I) = good source of iron. Note also that cooking foods in iron cookware increases the foods' absorbable iron.

Meat and Meat Alternates

1. Food as purchased	2. Purchase unit	3. Servings per purchase unit		4. Additional information
		1 oz.	1-1/2 oz.	
CHILI CON CARNE WITH BEANS	Pound	3.5		(I) 1/2-cup serving = 1.4 oz. meat/meat alternate
CORNED BEEF HASH	Pound	5.3		(I) 1/3-cup serving = 1 oz. cooked meat and 1/8-cup vegetable
BEEF, DRIED JERKEY, BEEF	Pound	16	10.6	(I) Only pure beef may be used.
CHICKEN, FRESH OR FROZEN				
WHOLE CHICKEN (w/neck and giblets)	Pound	6.5	3.8	1 lb. AP = 0.41 lb. cooked chicken (w/out skin)
CUT-UP CHICKEN PARTS				
Back pieces (6.0 oz.)	Pound	3.8	2.5	
Breast halves (6.1 oz.)	Pound	8.9	5.9	
Drumsticks (3.7 oz.)	Pound	6.5	4.3	
Liver	Pound	9.9	6.5	(I)
Thighs (4 oz.)	Pound	6.8	4.5	
Wings (3.1 oz.)	Pound	4.1	2.7	
CHICKEN PRODUCTS, CANNED				
USDA POULTRY	Pound	11.5	7.6	1 lb. AP = 0.72 lb. heated
CHICKEN FRANKFURTER*	Pound		10	10 hot dogs per lb. = 1.6 each
CHICKEN FRANKFURTER*	Pound	16 one-half pieces		8 hot dogs per lb. = 2 oz. each
FISH See Seafood entry, p. 14.				
FRANKFURTERS, BOLOGNA*				
Made of pork, beef, or other meat and poultry products				
BOLOGNA	Pound	16	10.6	
FRANKFURTERS	Pound		10	10 dogs per lb. = 1.6 oz. each
FRANKFURTERS	Pound	16 one-half pieces		8 dogs per lb. = 2 oz. each

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*Includes yields that are based on products that do not contain meat or poultry byproducts, cereals, or extenders.

Meat and Meat Alternates

1. Food as purchased	2. Purchase unit	3. Servings per purchase unit 1 oz.	1-1/2 oz.	4. Additional information
KNOCKWURST	Pound	16	10.6	
VIENNA SAUSAGE	Pound (drained weight)	16	10.6	
LAMB, FRESH OR FROZEN				
CHOPS, SHOULDER (w/bone)	Pound	7.3	4.9	1 lb. AP = 0.46 lb. cooked lean meat
LEG ROAST (w/out bone)	Pound	9.7	6.5	
STEW MEAT	Pound	10.4	6.9	
PORK, FRESH OR FROZEN				
CHOPS, LOIN (w/bone)	Pound	8.6	5.7	1 lb. AP = 0.41 lb. cooked lean meat
GROUND (no more than 24 percent fat)	Pound	11.6	7.7	1 lb. AP = 0.73 lb. cooked meat
Liver, untrimmed	Pound	9.7	6.5	(I)
ROAST LEG or Loin (w/out bone)	Pound	10.8	7.2	
ROAST LEG or Loin (w/bone)	Pound	8.6	5.7	
SAUSAGE (no more than 50 percent fat) bulk, link, or patty	Pound	7.5	5.0	
STEW MEAT	Pound	7.2	4.8	
PORK, MILDLY CURED				
CANADIAN BACON	Pound	11.0	7.3	
HAM (w/out bone)	Pound	10.0	6.7	
HAM (w/bone)	Pound	8.4	5.6	
HAM, Canned	Pound	10.2	6.8	
SHOULDER PICNIC (w/out bone)	Pound	11.2	7.8	
SHOULDER PICNIC (w/bone)	Pound	8.6	5.7	
PORK PRODUCTS, CANNED				
USDA, packed in juice	No. 2-1/2 can	14.7	9.8	

Meat and Meat Alternates

1. Food as purchased	2. Purchase unit	3. Servings per purchase unit 1 oz.	1-1/2 oz.	4. Additional information
SEAFOOD, FRESH OR FROZEN				
FISH FILLETS, fresh	Pound	11.2	7.4	1 lb. = 0.70 lb. cooked fish
FISH STEAKS, frozen	Pound	10.5	7.0	1 lb. AP = 0.66 lb. cooked fish
FISH STICKS (60 percent fish)	Pound	8.0	5.3	1 stick = 0.5 oz. cooked 2 sticks = 1 oz. cooked 3 sticks = 1.5 oz. cooked
FISH PORTION				
Breaded, fried (65 percent fish)	Pound	8.0	5.3	2 oz. portion = 1.1 oz. cooked 3 oz. portion = 1.6 oz. cooked 4 oz. portion = 2.2 oz. cooked
Battered, fried (45 percent fish)	Pound	5.3		3 oz. portion = 1.1 oz. cooked
SEAFOOD, CANNED				
CLAMS, Minced	7-1/2 oz. can	2.8	1.9	(I)
MACKEREL	15 oz. can	7.9	5.3	
SARDINES	15 oz. can	13.2	8.8	
SALMON, pink	15-1/2 oz. can	11.6	7.7	(I)
SHRIMP	13-1/4 oz. can	13.2	8.8	(I)
TUNA Water pack chunk	66-1/2 oz. can	51.2	34.1	(I)
	6-1/2oz. can	5.7	3.8	
	12-1/2 oz. can	11.0	7.3	1 can = 11 oz. drained
TUNA Solid pack	66-1/2 oz. can	50.5	33.6	(I)
	7 oz. can	6.3	4.2	
TUNA Grated or flake	60-1/2 oz. can	54.6	36.4	(I)

Meat and Meat Alternates

1. Food as purchased	2. Purchase unit	3. Servings per purchase unit		4. Additional information
		1 oz	1-1/2 oz.	
TURKEY, FRESH OR FROZEN				
WHOLE (w/out neck and giblets)	Pound	8.4	5.6	Yields are turkey (w/skin)
HALVES/PARTS	Pound	8.4	5.6	1 lb. AP = 0.53 lb. cooked turkey
Breasts	Pound	10.2	6.8	
Drumsticks	Pound	7.6	5.1	(l)
Thighs	Pound	8.6	5.7	(l)
TURKEY, Ground, USDA	Pound	10.7	7.1	(l) 1 lb. AP = 0.67 lb. cooked turkey
TURKEY ROAST, USDA	Pound	10.5	6.9	
TURKEY ROLLS, USDA	Pound	10.5	7.0	
TURKEY, CANNED				
BONED, solid pack	Pound	14.2	10.6	
BONED (w/broth)	Pound	7.1	5.3	
TURKEY, CURED				
TURKEY HAM	Pound	11.2		1.4 oz. serving yields 1 oz. lean meat
TURKEY HAM	Pound		7.4	2.1 oz. serving yields 1-1/2 oz. lean meat
TURKEY BOLOGNA*	Pound	16	12	
TURKEY FRANKFURTERS*	Pound	16 one-half pieces	10	10 dogs per lb. = 1.6 oz. each
TURKEY FRANKFURTERS*	Pound	16 one-half pieces		8 dogs per lb. = 2 oz. each

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*Includes meat and poultry products that are based on products that do not contain meat or poultry byproducts, cereals, or extenders.

Meat and Meat Alternates

1. Food as purchased	2. Purchase unit	3. Servings per purchase unit		4. Additional information
		1 oz.	1-1/2 oz.	
Meat Alternates				
EGGS				
DRIED EGG MIX USDA	Pound	16	16	
	6 oz. Pkg.	6.0	6.0	
DRIED WHOLE EGGS	Pound	32.0	32.0	
FRESH, Large	Dozen	12	12	1 large egg fulfills the meat alternate requirement for older children in all three age groups.
FRESH, Large	Each	1 egg	1 egg	
FROZEN WHOLE EGGS	Pound	9.0	9.0	1 lb. frozen = 1-7/8 cups or 9 large eggs.
CHEESE				
REGULAR MOISTURE				
American, cheddar, mozzarella, Swiss, Monterey jack	Pound	16.0	10.6	1 lb. = about 4 cups shredded
HIGH MOISTURE				
Cottage or ricotta	Pound	8.0	5.3	2 oz. or 1/4 cup = 1 oz. meat alternate
LOW MOISTURE				
Parmesan or Romano	Pound	16	10.6	3/8 cup grated = 1 oz. meat alternate
CHEESE FOOD PRODUCTS				
CHEESE FOOD (processed)	Pound	8.0	5.3	2 oz. serving = 1 oz. meat alternate
CHEESE SPREAD (processed)	Pound	8.0	5.3	2 oz. serving = 1 oz. meat alternate
CHEESE SAUCE				See question and answer number 18 on page 17.
BEANS, DRY				
BLACK-EYED BEANS OR PEAS	Pound	28.3	18.8	1/4 cup = 1 oz. meat alternate
GARBANZO (chickpeas)	Pound	24.6	16.4	

Meat and Meat Alternates

1. Food as purchased	2. Purchase unit	3. Servings per purchase unit		4. Additional information
		1 oz.	1-1/2 oz.	
GREAT NORTHERN (white)	Pound	25.5	17.0	
KIDNEY	Pound	24.8	16.5	
LIMA, small	Pound	23.4	15.6	
NAVY (pea)	Pound	23.9	15.9	
PINTO	Pound	24.9	16.6	
SOYBEANS	Pound	25.9	17.2	
CANNED DRY BEANS				
BEANS (baked, in sauce, or refried)	No. 10 can	48.9	32.2	
	No. 2-1/2 can	13.3	8.8	
PINTO, canned	No. 10 can	43.3	28.8	
	No. 303 can (16 oz.)	6.4	4.26	
BEANS WITH BACON IN SAUCE	Pound	4.7	3.1	
BEAN SOUP	No. 3 can (54 oz.)	23.0	15.3	Reconstitute 1 part soup with not more than 1 part water. 1/2 cup reconstituted = 1/4-cup cooked beans
PEAS AND LENTILS, DRY				
DRY SPLIT PEAS	Pound	23.1	15.3	
WHOLE DRY PEAS	Pound	25.6	17.1	
LENTILS	Pound	29.6	19.7	
PEA SOUP, canned	Pound	7.3	4.9	Reconstitute 1 part soup with not more than 1 part water; 1/2 cup reconstituted = 1/4-cup cooked peas
NUT AND SEED BUTTERS				
Almond, cashew, peanut, sesame (tahini), and sunflower	No. 10 can	97.5	65.0	2 Tbsp. = about 1.1 oz. nut and seed butters
	32 oz.	28.9	19.3	
	Pound	14.4	9.7	1 lb. = about 28 Tbsp.

Meat and Meat Alternates

1. Food as purchased	2. Purchase unit	3. Servings per purchase unit		4. Additional information
		1 oz.	1-1/2 oz.	
NUTS AND SEEDS				
Tree Nuts				
Almonds	Pound	16	10.6	1 lb. = about 3-1/2 cups chopped
Brazil Nuts	Pound	16	10.6	1 lb. = about 3-1/4 cups whole
Cashew Nuts	Pound	16	10.6	1 lb. = about 3-1/3 cups whole or halves
Filberts (Hazelnuts)	Pound	16	10.6	1 lb. = about 4 cups chopped
Macadamia Nuts	Pound	16	10.6	1 lb. = about 3-1/3 cups whole
Pecans	Pound	16	10.6	1 lb. = about 3-3/4 cups chopped
Pine Nuts (Pinyons)	Pound	16	10.6	
Pistachio Nuts	Pound	16	10.6	1 lb. = about 3-1/2 cups
Walnuts, Black	Pound	16	10.6	1 lb. = about 3-5/8 cups chopped
Walnuts, English	Pound	16	10.6	1 lb. = about 3-3/4 cups pieces
Other Nuts				
Peanut Granules	Pound	16	10.6	1 lb. = about 3-1/4 cups
Peanuts	Pound	16	10.6	1 lb. = about 3 cups whole
Soynuts	Pound	16	10.6	1 lb. = about 4-1/4 cups whole
Seeds				
Pumpkin and Squash Seeds	Pound	16	10.6	1 lb. = about 2 cups
Sesame Seeds	Pound	16	10.6	
Sunflower Seeds	Pound	16	10.6	1 lb. = about 3-1/2 cups
YOGURT	8 oz. cup	2		4 oz. yogurt = 1 oz. meat alternate for snack only (adults) (See Section 4, "Milk," for information pertaining to infants and children.)

Section 2

Fruits and Vegetables

Section 2—Fruits and Vegetables

CACFP regulations require that each breakfast, lunch, and supper served to older children and adults contain the minimum amounts of fruits and/or vegetables shown in tables 3A (page 6) and 3B (page 7). A fruit or vegetable may be served as one of the two components of an a.m. or p.m. supplement. Fruits and vegetables provide vitamins A and C, fiber, and other nutrients.

For lunch or supper the required amount must consist of two or more servings. Menu items, such as fruit cocktail and mixed vegetables, are considered as only one item. Large combination vegetable and/or fruit salads containing two or more vegetables and/or fruits in combination with meat or meat alternate intended to fulfill the role of an entree, such as a chef's salad or a fruit plate with cottage cheese, are considered as two or more servings.

Some examples of combinations for satisfying the 1/2-cup fruit/vegetable requirement are as follows:

3/8-cup vegetable and 1/8-cup fruit
1/4-cup vegetable and 1/4-cup vegetable
1/4-cup vegetable and 1/4-cup fruit
1/4-cup fruit and 1/4-cup fruit
1/4-cup juice (full-strength) and 1/4-cup vegetable
1/8-cup vegetable, 1/8-cup vegetable, and 1/4-cup fruit

Some examples of combinations for satisfying the 3/4-cup fruit/vegetable requirement are as follows:

3/8-cup vegetable and 3/8-cup fruit
1/4-cup vegetable and 1/4-cup vegetable and 1/4-cup fruit
3/8-cup vegetable and 1/4-cup vegetable and l/8-cup fruit
3/8-cup juice (full strength) and 3/8-cup vegetable
1/4-cup juice (full strength) and 1/2-cup vegetable

Small amounts of a fruit or vegetable (less than 1/8-cup per child) are considered a garnish and may **not** count toward the requirements.

Do not count full-strength fruit or vegetable juice to satisfy more than one-half of the fruit/vegetable requirement for lunch. Any product labeled juice, full-strength juice, single-strength juice, or reconstituted juice, is considered full-strength juice.

Juice drinks served either in liquid or frozen form may contain only a small amount of full-strength juice. The product label may indicate the percentage of full-strength juice in the product. This information is needed to determine the contribution of the product to the meal. To satisfy a part of the fruit/vegetable requirement, the product must contain at least 50 percent full-strength juice. Only the full-strength juice portion may be counted to satisfy the fruit/vegetable requirement. Refer to Policy Memorandum 84-213 (see Appendix B) for further instructions on fruit juices, juice drinks, and juice concentrates. (See question and answer number 2.)

NOTE: Throughout Table 13 the following letter codes are used: (A) = good source of vitamin A; (C) = good source of vitamin C; (I) = good source of iron. Note also that preparing foods in iron cookware increases the foods' absorbable iron.

Dry beans and peas may be credited as a vegetable or as a meat alternate, but they may not be credited as both a meat alternate and vegetable in the same meal service.

When planning menus, you should:

1. Include a fruit or vegetable high in vitamin A four or five times daily.
2. Include a fruit or vegetable high in vitamin C daily.
3. Include iron-rich foods every day, or cook in iron cookware.
4. Use fat, salt, and sugar in moderation.
5. Include a variety of fruits and vegetables. You can determine which types are in season by referring to "Spot the Season for Fresh Fruit and Vegetable Bargains" in Appendix C.
6. Include foods that are good sources of fiber.

Information Included in This Section

Fresh, canned, frozen, and dehydrated fruits and vegetables are listed alphabetically. Information on yields includes:

1. Yields in **1/4-cup servings** (or portions) (Review the examples in Section 6 that show how to calculate amounts needed for 1/2-cup and 3/4-cup servings.)
2. Yield information for standard size cans and packages
3. Yield information on juice concentrates, tomato paste, and tomato puree
4. Yield information on canned soups that contain at least 25 percent vegetable per cup of soup

Factors Affecting Yield

The yield of fruits and vegetables will vary according to the form of food used. For example, frozen vegetables usually yield more servings per pound than fresh, as the frozen products have been cleaned and blanched.

Instructions for Using Yield Data

The yield information is presented in columns 1 through 3 of Table 13, with additional information presented in column 4:

Column 1, "Food as purchased." Fruits and vegetables are listed in alphabetical order. Common forms of the food, such as fresh, frozen, or canned, are given.

Column 2, "Purchase unit." The purchase unit is generally given as a common can size, pound, or package.

Column 3, "Servings per purchase unit." This column shows the number of **1/4-cup servings** or portions you will get from each market unit **after preparation.** See the examples given in Section 6.

Column 4, "Additional information." This column indicates foods high in vitamin A, vitamin C, and iron. It also provides more information about the AP (as purchased) form of foods.

The following standards, found in column 4, "Additional information," in Table 13, indicate good sources of vitamins A and C or iron:

(A) equals good vitamin A source that has more than 750 IU per 1/4-cup serving.

(C) equals good vitamin C source that has more than 8 mg per 1/4-cup serving.

(I) equals good iron source that has more than 0.3 mg per 1/4-cup serving.

Questions and Answers About Fruits and Vegetables

The following items are **creditable** as fruits and vegetables:

Alfalfa sprouts

Apple cider (Credit the same as apple juice.)

Bean sprouts

Canned soups (See question and answer number 10.)

Coleslaw (See question and answer number 5.)

Cranberry sauce

Dates

Dehydrated vegetables (See question and answer number 4.)

Dried beans

Dried fruit

Figs

Fruit cocktail (See question and answer number 11.)

Fruit pie fillings (See question and answer number 6.)

Fruit roll (See question and answer number 14.)

Fruit sauces (See question and answer number 8.)

Fruitsicles (more than 50 percent full-strength juice) (See question and answer number 9.)

Green chili peppers (See pimientos entry in Table 13.)

Juice (See question and answer number 1.)

Juice concentrate (See question and answer number 3.)

Juice drinks (See question and answer number 2.)

Lemon juice drink (See question and answer number 12.)

Mixed vegetables (See question and answer number 11.)

Mushrooms

Olives

Pickles

Pimientos

Potato skins

Seaweed (See question number 4.)

Tomato paste (See question and answer number 7.)

Tomato puree (See question and answer number 7.)

Tomato sauce (See question and answer number 7.)

V-8 juice® (See juices entry in Table 13.)

Water chestnuts

The following items are **not creditable** as fruits and vegetables:

Catsup

Chili sauce

Chips and sticks (banana, potato, and corn)

Coconut

Commercial pizza and spaghetti sauce

Fruit-flavored powders and syrups

Fruit punch

Hominy (canned)

Jell-O®

Jelly, jam, and preserves

Juice drinks and juice cocktails (for example, cranberry juice cocktail and other variations of the drink)(Cranberry juice mixed with another full-strength juice is creditable.) (See question and answer number 2.)

Kool-aid®

Lemonade (or any other ade drinks)

Nectar

Pickle relish

Popcorn

Pop tart filling

Popsicles

Potato chips

Salsa

Tang®

1. Q: **How is juice defined for use in the CACFP?**

   A: Full-strength fruit or vegetable juice is defined as any product labeled *juice, full-strength juice, single-strength juice, 100 percent juice, reconstituted juice, or juice from concentrate*. It may be fresh, canned, frozen, or reconstituted from a concentrate and may be served in either liquid or frozen state or as an ingredient in a recipe. Examples of full-strength fruit and vegetable juice are apple (including cider), grape, grapefruit, grapefruit-orange, lemon, lime, orange, pear-apple, pineapple, prune, tomato, tangerine, and vegetable. Any blends of these juices are also acceptable.

2. Q: **What is a juice drink? Is it creditable in the CACFP?**

   A: A juice drink is a product resembling juice that contains full-strength juice along with added water and possibly other ingredients, such as sweeteners, spices, or flavorings. A juice drink may be canned, frozen, or reconstituted from a frozen concentrate or a "juice base." It may be served in either liquid or frozen form or as an ingredient in a recipe. Examples of juice drinks are apple juice drink, grape juice drink, orange juice drink, and pineapple-grapefruit juice drink. A juice drink may be credited toward satisfying the vegetable/fruit component of the child nutrition programs under these conditions:

   a. It must contain a **minimum of 50 percent full-strength juice.** (Note: Nectars and some common juice drinks, such as lemonade and cranberry juice cocktail, do not contain sufficient quantities of full-strength juice to satisfy this criterion. Nectars do not commonly contain 50 percent juice, and lemonade and cranberry juice cocktail require dilution beyond the 50 percent limit for palatability. However, a full-strength cranberry juice mixed with another full-strength juice for palatability is creditable.)

   b. Only the full-strength juice portion of the juice drink may be counted toward satisfying the vegetable/fruit component.

   c. The name of the product as it appears on the label must contain words such as *juice drink* or *diluted juice beverage* and may indicate the percent of full-strength juice in the product.

   d. The label ingredient statement must list the words *juice, full-strength juice, single-strength juice, reconstituted juice, juice from concentrate, or juice concentrate*.

3. Q: **Are juice concentrates creditable in the CACFP?**

   A: A juice concentrate may be used to satisfy the vegetable/fruit component of the child nutrition programs. When a juice concentrate is used in its reconstituted form, it is considered a full-strength juice and is credited accordingly. When a juice concentrate is used in its concentrated form, it may be credited on a reconstituted basis; that is, it may be credited as if water were added to make it equal to a full-strength juice. For example, a gelatin product containing 1 tablespoon of orange juice concentrate per serving could receive 1/4-cup fruit/vegetable credit because the orange juice concentrate theoretically could be reconstituted in a ratio of one part concentrate to three parts water (1 tablespoon + 3 tablespoons water equals 4 tablespoons or 1/4-cup credit).

4. Q: **Are dehydrated vegetables creditable? How are yields determined?**

   A: Yes. Dehydrated vegetables, including seaweed, are creditable.

   Yields for dehydrated vegetables must be based on the rehydrated volume. The fresh volume that may be stated on the container is **not** to be used. Keep in mind that rehydration yields often vary from brand to brand. This means that the following procedure needs to be repeated for each brand of dehydrated product.

   Determine the rehydrated volume as follows:

   a. Rehydrate a purchase unit of the dehydrated vegetable according to manufacturer's directions. If directions are not on the container, request rehydration directions from the manufacturer.
   b. Measure the rehydrated volume.
   c. Measure the number of 1/4-cup servings of rehydrated product one purchase unit provides.
   d. Keep a record of the yield data obtained for verification. Records should include information on the size of the purchase unit, the number of 1/4-cup servings of rehydrated product per purchase unit, the name of the manufacturer, and the manufacturer's directions on how to rehydrate the product.

5. Q: **May coleslaw be served in the CACFP? How is it credited?**

   A: The fruit/vegetable ingredients in coleslaw, such as cabbage, carrots, pineapple, apples, raisins, and so on, count toward satisfying part of the fruit/vegetable requirement. Other ingredients, such as nuts, marshmallows, and so on, are other foods and their weight/volume must be excluded when crediting a serving of coleslaw. Thus, a 1/4-cup serving of coleslaw containing other ingredients would not equal 1/4 cup of fruit/vegetable.

6. Q: **Are canned fruit pie fillings creditable in the CACFP?**

   A: Yes. Canned fruit pie fillings provide one-half credit; that is, 1/2 cup of fruit pie filling would provide 1/4 cup of fruit credit unless otherwise documented on the label (such as if the filling were sweetened with 100 percent fruit juice).

7. Q: **How are tomato paste, tomato puree, and tomato sauce credited in the CACFP?**

   A:

Tomato paste	1 tablespoon paste = 1/4-cup vegetable
Tomato puree	2 tablespoons puree = 1/4-cup vegetable
Tomato sauce	1/4-cup sauce = 1/4-cup vegetable

8. Q: **Are fruit sauces, such as orange sauce made with orange juice or blueberry sauce made with canned blueberries, creditable?**

   A: Yes. However, **only** the fruit portion of the sauce (i.e., the orange juice or canned blueberries) is creditable. Thus, to determine the creditable portion size, you should first determine the amount of fruit in each serving by dividing the total amount of fruit used by the number of servings prepared.

9. Q: **Are fruitsicles creditable in the CACFP?**

   A: To be credited, fruitsicles, popsicles, or frozen bars must contain a minimum of 50 percent full-strength juice, as indicated on the label of commercial products or according to the recipe used for homemade products. Only the full-strength juice portion may be counted to satisfy the fruit/vegetable requirement.

10. Q: **Are canned soups creditable toward meeting any part of the meal pattern?**

    A: When you are using commercially canned (condensed) soups, you must satisfy the following guidelines to fulfill requirements. Only five soup varieties are creditable:

    a. **Tomato,** which includes tomato, cream of tomato, tomato noodle, or tomato with rice or some other basic component.
    b. **Vegetable,** which includes vegetable, vegetarian vegetable, or vegetable with other basic components, such as meat or poultry.
    c. **Minestrone** counts toward the fruit/vegetable requirement **only.**
    d. **Clam chowder** counts toward the fruit/vegetable requirement **only.** The clams serve only as flavoring.
    e. **Bean or pea soup** may be counted toward satisfying the fruit/vegetable requirement **or** the meat alternate requirement, but they may not be credited as both a meat alternate and vegetable in the same meal service.

    Soups must be reconstituted according to directions on the container. **One 8-ounce cup of reconstituted soup provides 1/4 cup of the fruit/vegetable requirement.**

11. Q: **May fruit cocktail or mixed vegetables be used alone to satisfy the requirement of serving two or more fruits/vegetables at lunch or supper?**

    A: No. Menu items, such as fruit cocktail or mixed vegetables, are considered as only one item. However, large combination vegetable and/or fruit salads containing two or more vegetables and/or fruits served as the main dish can be credited as meeting the full requirement. These salads **must** contain at least 3/4 cup of two or more fruits and/or vegetables for children ages six to twelve years; 1/2 cup for ages three to six years; and 1/4 cup for ages one to three years. These salads must also contain a meat or meat alternate intended to fulfill the role of the main dish. A fruit plate with cottage cheese and a chef's salad are two such examples.

12. Q: **Is homemade lemonade creditable?**

    A: Ades do not satisfy the definition of juice and are thus not creditable in the CACFP. See Policy Memorandum No. 84-213 (Appendix B).

13. Q: **May raisins be served on hot or cold cereal and be credited toward the fruit/vegetable requirement?**

    A: Yes. But you must serve at least 1/8 cup of raisins to be credited. Any amount less than 1/8 cup would be considered a garnish or seasoning. If only 1/8-cup raisins is served in or on the cereal, an additional fruit, vegetable, or juice must be served to satisfy the total requirement.

14. Q: **May dry fruit roll that has been purchased or made at home be credited toward the fruit/vegetable requirement?**

    A: Yes. But you must measure the volume of dried fruit roll to determine how much is needed to make a 1/8- or 1/4-cup serving.

Table 13. Fruits and Vegetables

1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4. Additional information
APPLES			
Fresh, whole or small raw	Pound	8.4	1 lb. AP = 14.5 oz. or 0.91 lb. ready-to-eat raw or to cook
Fresh, chopped or sliced	Pound	12.0	
Fresh, baked or cooked	Pound	6.0	
Canned, slices, solid pack	No. 10 can	50.4	
Canned, slices, solid pack	No. 2-1/2 can (29 oz.)	10.0	
Dehydrated, slices or rings, regular moisture	Pound	21.1	
Dehydrated, slices or rings, cooked	Pound	28.7	
APPLESAUCE			
Canned (smooth or chunky)	No. 10 can	47.6	
Canned (smooth or chunky)	No. 2-1/2 can (29 oz.)	12.8	
APRICOTS			(A)
Fresh, whole, raw	Pound	11.9	1 lb. AP = 14.8 oz. or 0.93 lb. ready-to-serve raw
Canned, halves	No. 10 can	48.4	
Canned, halves	No. 2-1/2 can (29 oz.)	13.2	
ASPARAGUS			(A) (C)
Fresh, cooked	Pound	4.8	1 lb. AP = 8.5 oz. or 0.53 lb. ready-to-cook
Canned	No. 300 can (14.5 oz.)	5.8	
AVOCADO			
Fresh, diced	Pound	8.2	1 lb. AP = 10.7 oz. or 0.67 lb. ready-to-serve raw
Fresh, sliced	Pound	7.5	
BANANAS			
Fresh, raw	Pound	8.1	1 lb. AP = 10.7 oz. or 0.65 lb. ready-to-serve raw

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NOTE: Throughout this table the following letter codes are used: (A) = good source of vitamin A; (C) = good source of vitamin C; and (I) = good source of iron. Note also that cooking foods in iron cookware increases the foods' absorbable iron.

1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4. Additional information
BEANS			
BAKED, IN SAUCE, OR REFRIED	No. 10 can	48.9	
	No. 2-1/2 can	13.3	
BEAN SOUP	No. 3 can (54 oz.)	23.0	Reconstitute1 part soup with not more than 1 part water. 1/2 cup reconstituted = 1/4 cup cooked beans
BLACK-EYED BEANS OR PEAS			(I)
Fresh, cooked	Pound	10.3	
Canned, green	No. 10 can	43.0	
	No. 303 can (16 oz.)	6.5	
Frozen, cooked	Pound	11.2	
Dry, cooked	Pound	28.3	1 lb. dry = 2-3/4 cups
GARBANZO BEANS OR CHICKPEAS			(I)
Canned	Pound	7.2	
Dry, cooked	Pound	24.6	1 lb. dry = 2-1/2 cups
GREAT NORTHERN			(I)
Dry, cooked	Pound	25.5	1 lb. dry = 2-1/2 cups
GREEN BEANS			
Fresh	Pound	11.1	1 lb AP = 14 oz. or 0.88 lb. ready-to-cook
Canned, cut	No. 10 can	45.3	
Canned, cut	No. 303 can (16 oz.)	8.1	
Frozen, cooked	Pound	11.6	
KIDNEY BEANS			(I)
Canned	No. 10 can	41.9	
Canned	No. 303 can (16 oz.)	6.2	
Dry	Pound	24.8	1 lb. dry = 2-1/2 cups
LIMA BEANS			
Fresh, cooked	Pound	10.8	
Canned, green	No. 10 can	41.0	
	No. 303 can (16 oz.)	6.2	

1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4. Additional information
LIMA BEANS (continued)			
Frozen, cooked	Pound	11.0	
Dry, cooked	Pound	24.0	1 lb. dry = 2-3/8 cups
NAVY BEANS			(l)
Dry, cooked	Pound	23.9	1 lb. dry = 2-1/4 cups
PINTO BEANS			
Canned	No.10 can	43.3	
	No.303 can (16 oz.)	6.4	
Dry	Pound	28.6	
SOYBEANS			(l)
Fresh, cooked	Pound	10.7	
Canned, cooked	Pound	7.3	
Dry, cooked	Pound	25.9	1 lb. dry = 2-1/2 cups
WAX BEANS			(l)
Fresh	Pound	9.4	
Canned	No. 10 can	46.8	
Canned	No. 303 can (16 oz.)	7.1	
BEAN SPROUTS			
Fresh			
Alfalfa	Pound	39.9	1 lb. AP = 1.21 lb. ready-to-serve raw
Mung	Pound	26.2	1 lb. AP = 14 oz. or 0.89 lb. parboiled
Soybean	Pound	17.2	1 lb. AP = 15 oz. or 0.95 lb. parboiled
Canned (mung)	Pound	7.3	
Canned (mung)	No. 10 can	46.9	
BEETS			
Fresh, raw (w/out tops)	Pound	11.6	1 lb. AP = 12 oz. or 0.77 lb. pared
Fresh, cooked, sliced	Pound	7.7	1 lb. AP = 11.7 oz. or 0.73 lb. cooked slices
Canned, diced	No. 303 can (16 oz.)	7.0	
	No. 10 can	47.6	

1. Food as purchased	2. Purchase unit	3. Serving per unit 1/4-cup portions	4. Additional information
BEETS (continued)			
Canned, sliced	No. 303 can (16 oz.)	6.6	
	No. 10 can	43.5	
BEET GREENS			(A) (I)
Fresh, untrimmed, cooked	Pound	3.5	1 lb. AP = 0.48 lb. ready-to-cook
BERRIES			
BLACKBERRIES, BOYSENBERRIES, AND OLLALIEBERRIES			(C) (I)
Fresh, raw	Pound	11.9	1 lb. AP = 15.3 oz. or 0.96 lb. ready-to-serve raw
Canned	No. 303 can (16 oz.)	7.4	
Canned	No. 10 can	47.8	
Frozen (w/sugar), thawed	Pound	9.0	
Frozen, individual berries	Pound	11.0	
BLUEBERRIES			(I)
Fresh, raw	Pound	11.9	1 lb. AP = 15.3 oz. or 0.96 lb. ready-to-serve raw
Canned	No. 300 can (15 oz.)	6.8	
Canned	No. 10 can	47.6	
Frozen, unsweetened, thawed	Pound	11.7	
Frozen (w/sugar), cooked	Pound	7.8	
CRANBERRIES			
Fresh, raw	Pound	15.6	1 lb. AP = 15.2 oz. or 0.95 lb. ready-to-cook or serve raw
Canned, relish or sauce	No. 300 can (15 oz.)	6.7	
Canned, relish or sauce	No. 10 can	48.0	
Frozen, individual berries		11.0	

1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4. Additional information
RASPBERRIES			(C)
Fresh, raw	Pound	12.1	1 lb. AP = 15.3 oz or 0.96 lb. ready-to-cook or serve raw
Canned	No. 10 can	48.0	
Canned	No. 303 can (16 oz.)	7.4	
Frozen, unsweetened, thawed	Pound	7.2	
STRAWBERRIES			(C)
Fresh, raw	Pound	10.5	1 lb. AP = 14 oz. or 0.88 lb. ready-to-serve raw
Canned	No. 303 can (16 oz.)	7.5	
Canned	No. 10 can	47.8	
Frozen, unsweetened, thawed	Pound	7.1	
BOK CHOY (See Chard, Swiss.)			
BROCCOLI			(A) (C)
Fresh, raw	Pound	9.8	1 lb. AP = 13 oz. or 0.81 lb. ready-to-serve raw or ready to cook
Fresh, cooked	Pound	9.4	
Frozen, spears or cut, then cooked	Pound	9.6	
BRUSSELS SPROUTS			(C)
Fresh, cooked	Pound	8.5	1 lb. AP = 12 oz. or 0.76 lb. ready-to-cook
Frozen, cooked	Pound	10.4	
CABBAGE, CHINESE			(C)
Fresh, raw,	Pound	26.3	1 lb. AP = 14.8 oz. or 0.93 lb. ready-to-cook or serve raw
Fresh, cooked	Pound	10.6	
CABBAGE, GREEN			(C)
Fresh, raw, chopped	Pound	17.7	1 lb. AP = 14 oz. or 0.87 lb. ready-to-cook or serve raw
Fresh, cooked, shredded	Pound	13.8	

Fruits and Vegetables

1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4. Additional information
CABBAGE, RED			(C)
Fresh, raw, chopped	Pound	13.0	1 lb. AP = 13 oz. or 0.83 lb. ready-to-cook or serve raw
Fresh, cooked, shredded	Pound	13.3	
CANTALOUPE (See Melon.)			
CARROTS			(A)
Fresh, raw, stick	Pound	10.3	1/4 cup = 6 strips of 4" x 1/2" x 1/2"
Fresh, chopped	Pound	10.6	
Fresh, cooked	Pound	8.4	
Canned, diced or sliced	No. 10 can	47.4	
Canned, diced or sliced	No. 303 can (16 oz.)	7.2	
Frozen, sliced, cooked	Pound	10.5	
CAULIFLOWER			(C)
Fresh, raw florets	Pound	12.3	1 lb. AP = 9.9 oz. or 0.62 lb. ready-to-cook or serve raw
Fresh, cooked florets	Pound	8.8	
Frozen, cooked	Pound	9.2	
CELERY			
Fresh, raw sticks	Pound	12.2	1/4 cup = 4 sticks about 3" x 3/4"
Fresh, chopped	Pound	12.5	
Fresh, cooked	Pound	8.7	1 lb. AP = 13 oz. or 0.83 lb. ready-to-cook or serve raw
CHARD, SWISS (Red or green)			(A) (C)
Fresh, raw	Pound	6.3	1 lb. AP = 15 oz. or 0.92 lb. ready-to-cook or serve raw
Fresh, cooked	Pound	6.3	
CHERRIES			
Fresh, raw	Pound	8.5	1/4 cup = 7 whole cherries
Fresh, cooked (w/sugar)	Pound	6.4	1 lb. AP = 15.6 oz. or 0.98 lb. ready-to-serve (w/pits)
Canned	No. 10 can	45.8	
Canned	No. 303 can (16 oz.)	6.9	1 lb. AP = 13 oz. or 0.84 lb. pitted
Frozen, thawed	Pound	7.0	
Frozen, cooked	Pound	5.9	

1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4. Additional information
CHILES, GREEN			
Canned	No. 10 can	51.4	1 No. 10 can = about 12-7/8 cups drained vegetable
Chopped	Pound	7.9	
COLLARDS			(A) (C)
Fresh, leaves untrimmed	Pound	6.2	1 lb. AP = 0.57 lb. ready-to-cook
Fresh, leaves and stems, cooked	Pound	10.5	1 lb. AP = 0.74 lb. ready-to-cook
Canned	No. 10 can	24.7	
Canned	No. 303 can (16 oz.)	3.7	
Frozen, chopped, cooked	Pound	9.2	
CORN			
Fresh (w/husk), cooked	Pound	3.7	1 lb. AP = 0.33 lb. edible portion cooked
Fresh (w/out husk), cooked	Pound	5.6	1 lb. AP = 0.55 lb. raw cut corn
Canned, creamed	No. 303 can (16 oz.)	6.5	
Canned, vacuum pack	No. 10 can	41.7	
Canned, vacuum pack	No. 2 can (12 oz.)	6.6	
Canned, liquid pack	No. 10 can	46.4	
Canned, liquid pack	No. 303 can (16 oz.)	6.7	
Frozen, whole kernel	Pound	11.0	1/4-cup cooked vegetable
CUCUMBERS			
Fresh, raw	Pound	12.4	1 lb. AP = 0.84 lb. ready-to-serve
CURRANTS			
Dehydrated	Pound	13.8	1 lb. dry = 3-1/2 cups
DATES			(I)
Dehydrated (w/out pits)	Pound	11.1	
Moisturized, whole	Pound	10.0	1/4 cup = 5 dates

Fruits and Vegetables

1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4. Additional information
EGGPLANT			
Fresh, cooked	Pound	6.7	1 lb. AP = 0.81 lb. ready-to-cook
FIGS			
Fresh	Pound	8	1-1/2 figs = 1/4 cup
Canned	Pound	7.1	
Dehydrated	Pound	10.4	1/4-cup dry fruit = 3 figs
FRUIT, MIXED			
Fruit Cocktail	No. 10 can	46.9	Cherries, grapes, peaches, pears, pineapple
	No. 2-1/2 can	12.8	
	No. 303 can	7.0	
Salad fruit	No. 10 can	48.6	Apricots, cherries, grapes, peaches, pears, pineapple
	No. 2-1/2 can	13.3	
	No. 303 can	7.3	
GRAPEFRUIT			(C)
Fresh, sections and juice	Pound	4.1	1 lb. AP = 8.3 oz. or 0.52 lb. ready-to-serve raw
Canned sections and juice	No. 303 can (16 oz.)	7.2	1/4 grapefruit = 1/4 cup
Frozen sections and juice	Pound	7.5	
GRAPES			
Fresh	Pound	10.0	About 9 grapes = 1/4 cup
Canned, seedless	No. 10 can	50.0	1 lb. AP = 15.5 oz. or 0.97 lb. ready-to-serve raw
Canned, seedless	No. 303 can (16 oz.)	7.4	
HONEYDEW MELON (See Melon.)			
JICAMA			
Raw, diced	Pound	11.2	
Cooked, diced	Pound	8.7	

1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4. Additional information
JUICES			
FRESH OR CANNED SINGLE STRENGTH (100 percent juice)	No. 10 can (96 fl. oz.)	48.0	Equals 24—1/2 cups
Vegetable and fruit juices, such as apple, cranberry, grape, grapefruit, lemon, orange, pineapple, prune, tomato, tangerine, or any combination of the above	No. 3 cyl. (46 fl. oz.)	23.0	Equals 11—1/2 cups
	Quart (32 fl. oz.)	16.0	Equals 8—1/2 cups
	No. 2-1/2 can (25.5 fl. oz.)	12.7	Equals 6—1/2 cups
NOTE: Be sure cranberry juice is 100 percent juice, not cranberry juice cocktail.			Grapefruit, lemon, orange, pineapple, tangerine, and tomato juices are good sources of vitamin C.
FROZEN CONCENTRATED	32 fl. oz. can	64.0	1 Tbsp. concentrate = 1/4-cup juice
Any fruit, such as apple, grape, grapefruit, lemon, lime, and orange (1 part juice to 3 parts water)	6 fl. oz. can	12.0	
KALE, untrimmed	Pound	10.8	(A) (C) 1 lb. AP = 10.7 oz. or 0.67 lb. ready-to-cook
KIWI			(C)
Fresh	Pound	6.9	
LETTUCE			
ENDIVE OR ESCAROLE Fresh pieces	Pound	19.9	1 lb. AP = 12 oz. or 0.78 lb. ready-to-serve raw (A)
HEAD LETTUCE Fresh pieces	Pound	20.8	1 lb. AP = 12 oz. or 0.76 lb. ready-to-serve raw
LEAF LETTUCE Fresh pieces	Pound	21.7	1 lb. AP = 10.5 oz. or 0.66 lb. ready-to-serve raw
ROMAINE Fresh pieces	Pound	31.3	1 lb. AP = 10 oz. or 0.64 lb. ready-to-serve raw
WATERCRESS	Pound	50.5	1 lb. AP = 14.6 oz. or 0.92 lb. ready-to-serve raw (A)
MANGOES			(A) (C)
Fresh, raw	Pound	7.6	1 lb. AP = 11 oz. or 0.69 lb. ready-to-serve raw

1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4. Additional information
MELON			
CANTALOUPE			(A) (C)
Fresh, raw	Pound	5.8	1 lb. AP = 8 oz. or 0.52 lb. ready-to-serve
Frozen melon balls in syrup	Pound	7.8	
Frozen (w/sugar)	Pound	8.7	
HONEYDEW			(C)
Fresh, cubes	Pound	4.9	1 lb. AP = 0.46 lb. ready-to-serve raw
Frozen, balls	Pound	8.7	
WATERMELON			
Fresh, cubes	Pound	6.4	1 lb. AP = 9 oz. or 0.57 lb. ready-to-serve
MUSHROOMS			
Fresh, raw	Pound	18.7	1 lb. AP = 15.6 oz. or 0.98 lb. ready-to-serve raw or to cook
Fresh, cooked	Pound	8.3	
Canned	No. 10 can	49.4	
Canned	No. 300 can (8 oz.)	5.8	
MUSTARD GREENS			(A) (C)
Fresh, cooked	Pound	13.2	1 lb. AP = 14.8 oz. or 0.93 lb. ready-to-cook
Canned	No. 10 can	42.8	
Canned	No. 303 can	7.0	
Frozen, chopped	Pound	11.6	
NECTARINES			(A)
Fresh, raw	Pound	8.6	1 lb. AP = 14.5 oz. or 0.91 lb. ready-to-serve raw
OKRA			(C)
Fresh, cooked	Pound	9.0	1 lb. AP = 14 oz. or 0.87 lb. ready-to-cook
Canned, cut	No. 10 can	38.8	
Canned, cut	No. 303 can (15.5 oz.)	6.0	

1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4. Additional information
OKRA (continued)			
Frozen, cut, cooked	Pound	9.1	
OLIVES, ripe or green			
Canned, whole, large	Pound No. 10 can	15.3 olives 48	1/4 cup = about 8 olives
ONIONS			
GREEN, fresh, raw	Pound	15.0	1 lb. AP = 13 oz. or 0.83 lb. ready-to-serve raw (w/tops)
YELLOW, WHITE, OR RED			
Mature, fresh, chopped	Pound	9.3	1 lb. AP = 14 oz. or 0.88 lb. ready-to-cook or serve raw
Fresh, sliced, cooked	Pound	7.9	
Canned	No. 10 can	31.2	
Canned	No. 303 can (16 oz.)	4.8	
ORANGES			(C)
Fresh, raw	Pound	7.2	1 lb. AP = 11.3 oz. or 0.71 lb. ready-to-serve
Canned, sections	No. 303 can (16 oz.)	7.3	
PAPAYA			(A) (C)
Fresh, cubed	Pound	8.6	1 lb. AP = 10.7 oz. or 0.67 lb. ready-to-serve
Fresh, mashed	Pound	5.1	
PARSLEY			(A)
Fresh	Pound	83.4	1 lb. AP = 14.7 oz. or 0.92 lb. ready-to-serve raw
PARSNIPS			
Fresh, cooked	Pound	8.1	1 lb. AP = 13 oz. or 0.83 lb.
PEACHES			(A)
Fresh, raw	Pound	7.7	1 lb. AP = 12 oz. or 0.76 lb. ready-to-serve raw or to cook

Fruits and Vegetables

1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4. Additional information
PEACHES (continued)			
Canned, diced	No. 10 can	48.7	
Canned, diced	No. 2-1/2 can (29 oz.)	13.3	
Canned, slices, halves	No. 10 can	47.0	
Canned, slices, halves	No. 2-1/2 can (29 oz.)	13.0	
Frozen, sliced, thawed	Pound	7.3	
PEARS			
Fresh, raw	Pound	7.9	1 lb. AP = 14.7 oz. or 0.92 lb. ready-to-serve or to cook
Canned, diced	No. 10 can	47.6	
Canned, diced	No. 2-1/2 can (29 oz.)	13.1	
Canned, halves	No. 10 can	52.0	
Canned, halves	No. 2-1/2 can (29 oz.)	14.3	
PEAS, EDIBLE POD (CHINESE SNOW PEAS)	Pound	11.4	Both pod and peas are edible.
PEAS, GREEN			(I)
Fresh, raw	Pound	10.6	1 lb. AP = 6 oz. or 0.38 lb. ready-to-cook
Canned	No. 10 can	44.2	
Canned	No. 303 can (16 oz.)	6.7	
Frozen	Pound	10.1	
Dehydrated, split peas	Pound	23.1	1 lb. dry = 2-1/4 cups
PEAS AND CARROTS			(A)
Canned	No. 10 can	41.3	
Canned	No. 303 can (16 oz.)	6.3	
Frozen	Pound	10.9	

Fruits and Vegetables

1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4 Additional information
PEPPERS, GREEN			(C)
Fresh, raw	Pound	14.7	1 lb. AP = 12.8 oz. or 0.80 lb. ready-to-cook or serve raw
Frozen, diced, cooked	Pound	7.3	
PICKLES, DILL	Each	1/2 pickle	1/4-cup = 1/2 of a pickle, 3-1/2 to 4 inches long
PIMIENTOS			(A) (C)
Fresh, raw	Pound	14.7	
Canned, chopped or diced	No. 10 can	40.7	1 lb. AP = 12.8 oz. or 0.80 lb. ready-to-serve raw
Canned, chopped or diced	No. 2-1/2 can (28 oz.)	11.2	
PINEAPPLE			(C)
Fresh, raw	Pound	6.4	1 lb. AP = 8.6 oz. or 0.54 lb. ready-to-serve raw
Canned, chunks or crushed	No. 10 can	50.0	
Canned, chunks or crushed	No. 2 can (20 oz.)	9.4	
Canned, slices	No. 10 can	47.5	
Canned, slices	No. 2 can (20 oz.)	8.8	
Frozen, chunks	Pound	7.3	
PLANTAINS			(A)
Fresh, green, cooked	Pound	7.5	1 lb. AP = 9.9 oz. or 0.62 lb. ready-to-cook
Fresh, ripe, cooked	Pound	5.6	
PLUMS			(A)
Fresh, Italian or purple	Pound	10.7	1 lb. AP = 15 oz. or 0.94 lb. ready-to-serve or cook
Fresh, Japanese or hybrid	Pound	6.4	
Canned, purple, whole	No. 10 can	52.3	
Canned, purple, whole	No. 2-1/2 can (30 oz.)	14.5	

1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4. Additional information
POTATOES, WHITE			(C)
FRESH, baked or cooked	Pound	8.9	1 lb. AP = 13 oz. or 0.81 lb. baked potato (w/skin)
FRESH, mashed, cooked	Pound	8.4	
CANNED, small, whole	No. 10 can	43.7	
CANNED, small, whole	No. 303 can (16 oz.)	6.8	
FROZEN FRENCH FRIES			
Regular, crinkle or straight cut	Pound	13.7	
HASH BROWNS	Pound	7.7	
SKINS, pieces (w/skin) precooked	Pound	10.6	1 potato skin = 1/4 cup
POTATO ROUNDS	Pound	10.9	about 4 pieces
DEHYDRATED			
Diced	Pound	45.1	
Flakes or granules	Pound	48.6	
PRUNES			(I)
Dehydrated (w/pits)	Pound	9.6	About 6 prunes
Dehydrated (w/out pits)	Pound	10.6	About 6 prunes
Canned	No. 10 can	46.0	
Canned	Pound	6.8	
PUMPKIN			(A)
Fresh, cooked	Pound	4.7	1 lb. AP = 11.2 oz. or 0.7 lb. ready-to-cook
Canned	No. 10 can	51.5	
Canned	No. 2-1/2 can (29 oz.)	14.1	
RADISHES			
Fresh, raw (w/out tops)	Pound	12.8	about 7 small radishes

Fruits and Vegetables

1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4. Additional information
RAISINS			(I)
Dehydrated, seedless	Pound	12.6	
Dehydrated, seedless	Box (1.3 to 1.5 oz.)	1	
RHUBARB			
Fresh, cooked stems (w/sugar)	Pound	6.2	
Frozen	Pound	10.0	
RUTABAGAS, fresh, cooked	Pound	8.3	(C)
SAUERKRAUT			(C)
Canned	No. 10 can (99 oz.)	58.6	
	No. 2 1/2 can (27 oz.)	15.0	
	No. 303 can (16 oz.)	9.4	
SOUPS, CANNED Condensed soups (1 part soup to 1 part water) clam chowder, minestrone, tomato, tomato with other basic components, such as rice, vegetable (all vegetable), and vegetable with other basic components, such as meat or poultry			Reconstitute 1 part soup with not more than 1 part water
	No. 3 cyl. 50 oz. (about 46 fl. oz.)	11.5	1 cup reconstituted (about 1/4 cup vegetable)
	Pound	3.6	1 cup reconstituted (about 1/4 cup vegetable)
	Picnic (about 10.75 oz.)	2.4	1 cup reconstituted (about 1/4 cup vegetable)
Ready-to-serve soups clam chowder, minestrone, tomato, tomato with other basic components, such as rice, vegetable (all vegetable), and vegetable with other basic components, such as meat or poultry	8 fl. oz. can	1.0	1 cup serving (about 1/4 cup vegetable)

Fruits and Vegetables

1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4. Additional information
SPINACH			(A) (C) (I)
Fresh, partly trimmed	Pound	30.7	1 lb. AP = 14 oz. or 0.88 lb. ready-to-cook or serve raw
Fresh, cooked	Pound	7.6	
Canned	No. 10 can	25.2	
Canned	No. 303 can (15 oz.)	3.8	
Frozen, chopped, cooked	Pound	5.6	
SQUASH			
SUMMER			
Yellow, fresh, cooked	Pound	7.3	
Zucchini, fresh, raw	Pound	14.4	
Zucchini, fresh, cooked	Pound	7.6	
Canned	No. 10 can	26.5	
Canned	No. 303 can (16 oz.)	4.0	
Frozen, yellow	Pound	7.9	
Frozen, zucchini	Pound	7.0	
WINTER			(A)
Acorn, fresh, cooked, mashed	Pound	4.7	
Butternut, cooked	Pound	7.5	
Hubbard, cooked	Pound	4.4	
Frozen, cooked	Pound	7.0	
SWEET POTATOES			(A) (C)
Fresh, cooked, sliced	Pound	9.1	1 lb. AP = 12.8 oz. or 0.80 lb. peeled, ready-to-cook
Canned, cut or whole	No. 10 can	45.4	
Canned, cut or whole	No. 303 can (16 oz.)	6.7	

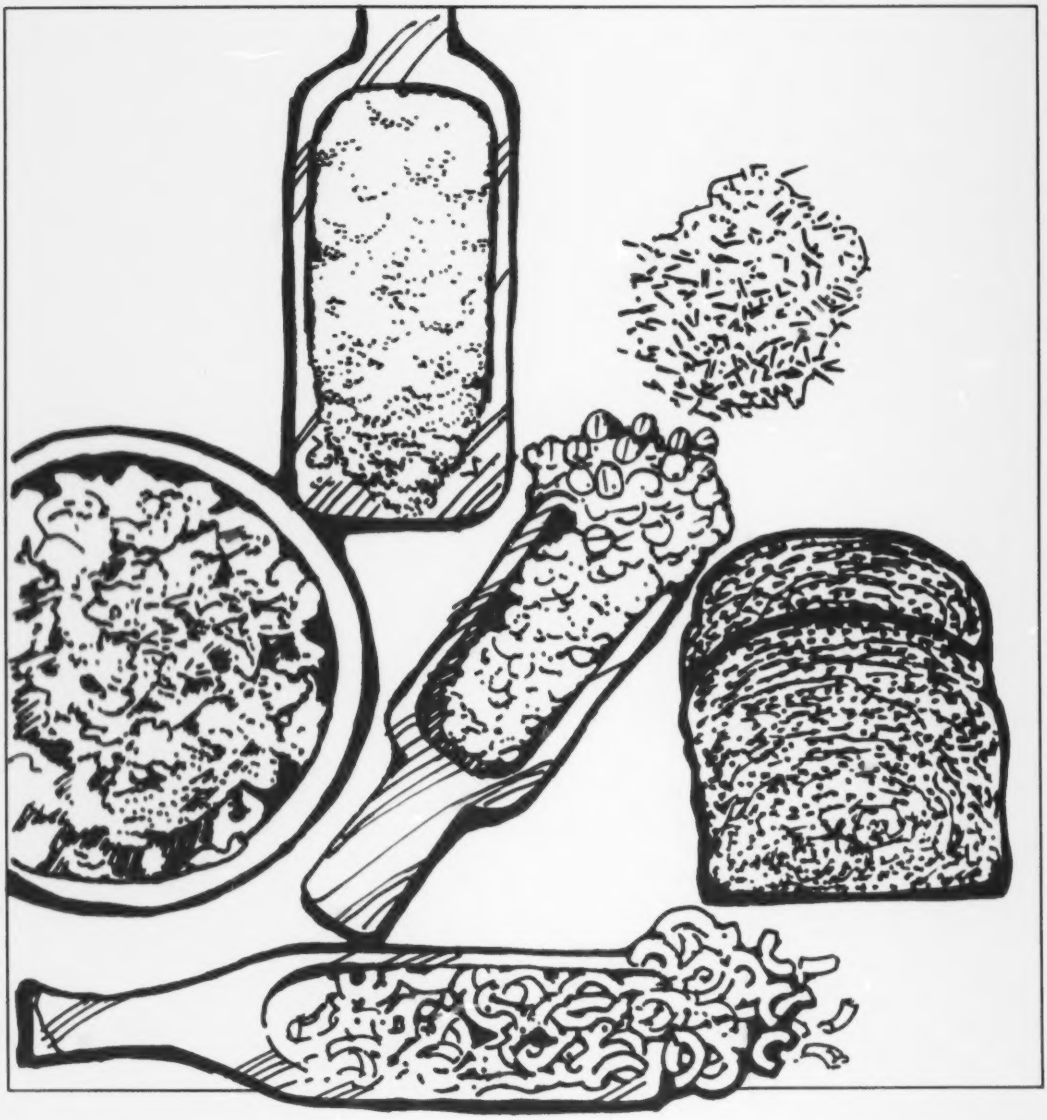
1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4. Additional information
SWEET POTATOES (continued)			
Dehydrated, flakes	Pound	18.5	
Frozen in syrup	Pound	7.6	
TANGERINES			(C)
Fresh	Pound	8.4	1 lb. AP = 11.8 oz. or 0.74 lb. ready-to-serve
Canned, Mandarin oranges	Pound	7.3	
TANGELOS			(C)
Fresh	Pound	7.2	1 lb. AP = 11.3 oz. or 0.71 lb. ready-to-serve
TOMATOES			(A) (C)
Fresh, raw, cut	Pound	9.0	1 lb. AP = 0.99 lb. ready-to-serve raw
Cherry, fresh, raw	Pound	11.8	
Canned	No. 10 can	48.8	
Canned	No. 2-1/2 can (28 oz.)	13.4	
TOMATO PASTE			(A) (C) (I)
Canned	No. 10 can	192.0	1 Tbsp. paste = 1/4-cup vegetable
Canned	Picnic (12 oz.)	20.7	
TOMATO PUREE			(A) (C) (I)
Canned	No. 10 can	96.0	2 Tbsp. puree = 1/4-cup vegetable
Canned	No. 303 can (16 oz.)	14.4	
TOMATO SAUCE			(A) (C) (I)
Canned	No. 10 can	50.7	1 No. 10 can paste + 3 cans of water = tomato sauce
Canned	Pound	7.6	1/4-cup sauce = 1/4-cup vegetable

TOMATILLOS (See Tomatoes, fresh and canned.)

1. Food as purchased	2. Purchase unit	3. Servings per unit 1/4-cup portions	4. Additional information
TURNIP			(C)
Fresh, raw (w/out tops)	Pound	11.2	
Fresh, cooked	Pound	8.7	
TURNIP GREENS			(A)
Fresh, cooked, untrimmed	Pound	6.5	1 lb. AP = 12.6 oz. or 0.79 lb. ready-to-cook
Canned	No. 10 can	27.6	(I)
Canned	Pound	4.5	(I)
Frozen, chopped or whole leaf	Pound	9.6	
VEGETABLES, MIXED			(A) (I)
Canned	No. 10 can	41.3	
Canned	No. 303 can (16 oz.)	6.3	
Frozen	Pound	8.1	
WATER CHESTNUTS			
Canned	Pound	6.7	

Section 3

Bread and Bread Alternates



Section 3—Bread and Bread Alternates

CACFP regulations require that each breakfast, lunch, and supper served to older children and adults contain the amount of bread and bread alternates shown in the meal patterns found in tables 3A and 3B on pages 5 and 6. A bread or bread alternate may be served as one of the two components of an a.m. or p.m. supplement. The bread or bread alternate must be made from whole-grain or enriched flour and serve the customary function of bread in a meal. This means the item must be served as an accompaniment to the main dish (e.g., rice) or a recognizable part of the main dish (e.g., spaghetti). Enriched or whole-grain breads and cereals provide B vitamins, protein, minerals, and fiber.

You may serve a combination of bread and cereal to satisfy the requirement. For example, a fourth of a slice of bread and 2 level tablespoons (1/8 cup) of cooked oatmeal for breakfast would provide the required amount of this component for a three- to six-year-old child. Remember that the serving size for hot cooked cereals is different from that for cold dry cereals.

Hot breads, such as cornbread and muffins, can add variety as well as needed nutrients to snacks. Enriched soda and graham crackers may be used, but so-called party crackers are not recommended.

Breakfast and Supplements Only

The following items can be used for breakfast and supplements (snacks) only: breakfast cereals (both dry and cooked), coffee cake, doughnuts, sweet rolls and buns, and toaster pastries.

Cookies may be used for a.m. or p.m. supplements (snacks) only. Whole grain or enriched flour must be the predominant ingredient. Cookies should not be served more than two times per week. Cookies sweetened with fruit juice do not contain granulated sugar.

Criteria for Determining the Minimum Weight of a Serving

The following criteria are used by USDA to determine the minimum weight or size of servings listed in the guide:

a. The nutrients (primarily iron) provided by the grain content of a 25-gram (or 0.9-ounce) slice of enriched white bread or an equal amount of enriched or whole grain meal or flour
b. Practical serving size
c. Total amount of solids of the item (Bread and bread alternates have been divided into four groups [A, B, C, and D] according to moisture content. Items within each group have approximately the same nutrient content, percent solids, and grain content per serving.)

To determine the weight and/or serving size of an item **not** listed in the guide: (1) decide if the item is most like Group A, B, C, or D; and (2) weigh a sample on a food service scale to see how much of the item equals the serving size you need.

Example:

You bake your own cornbread and need to know what size square will equal 1 serving. Cut a piece of cornbread and weigh it. If it is too large, slice a bit off until you have 0.9 oz. (25 grams). Measure the piece of cornbread (length times width) and record the measurements on your recipe for future reference.

1/2 serving = 0.5 oz. (13 grams) 2 inches by 2 inches (.78 centimetres by .78 centimetres)

1 serving = 0.9 oz. (25 grams) 4 inches by 4 inches (1.56 centimetres by 1.56 centimetres)

Questions and Answers About Bread and Bread Alternates

The following items are **creditable** as bread and bread alternates:

Breading and/or batter (on meat products) (See question and answer number 7.)
Bread pudding (snacks only) (See question and answer number 17.)
Brownies (bar cookie) (See question and answer number 1.)
Cereal (whole-grain, enriched, or fortified) (See question and answer number 3.)
Chow mein noodles
Coffee cake (breakfast and snacks only)
Cookies (snacks only) (See question and answer number 5.)
Corn tortillas and corn products (See question and answer number 8.)
Corndog breading (See question and answer number 9.)
Croutons (See question and answer number 18.)
Doughnuts (breakfast and snacks only)
Egg roll/won ton wrappers
Graham crackers (after age two years)
Grains (such as bulgur, oats, wheat, farina, cornmeal, millet, and so forth)
Granola bars (See question and answer number 6.)
Granola cereal (creditable for grain portion only) (See question and answer number 4.)
Grits (enriched corn grits or dried hominy grits)
Macaroni and macaroni products (lasagna, elbow macaroni, spaghetti; enriched)
Noodles and noodle products (enriched)
Pie crust (main dish) (See question and answer number 11.)
Popovers
Pop tarts (breakfast and snacks only) (See question and answer number 13.)
Pretzels (soft only)
Puff pastry shells (See question and answer number 12.)
Quick breads (See question and answer number 14.)
Rice cakes (See question and answer number 22.)
Rice pudding (snacks only) (See question and answer number 17.)
Snack crackers (See question and answer number 2.)
Stuffing (bread) (homemade) (See question and answer number 10.)
Sweet rolls and sweet buns (breakfast and snacks only)
Taco shells (whole and pieces)
Toaster pastry crust (breakfast and snacks only)

The following items are **not creditable** as bread and bread alternates:

Bread stuffing (commercial, e.g., Stove Top®) (See question and answer number 10.)
Cakes
Caramel corn
Cheese puffs
Chips (taco, potato, corn, and so on)
Corn (Credit as a vegetable.)
Corn grits (unenriched)
Cupcakes
Gingerbread
Hominy, canned
Ice cream cones
Nut or seed meals and flours (See question and answer number 21.)
Pie crust (dessert) (See question and answer number 16.)
Pineapple upside-down cake (See question and answer number 15.)
Popcorn
Potatoes (Credit as a vegetable.)
Pretzel sticks
Tapioca
Wheat germ

1. Q: **Are brownies creditable in the CACFP?**

   A: Brownies are considered a bar cookie and thus are creditable as a bread alternate for supplements (snacks) only. All guidelines that apply to the service and crediting of cookies would also apply to brownies (see question and answer number 5).

2. Q: **May snack crackers, such as Ritz®, Cheez-its®, Wheat Thins®, Triscuits®, and so on, be credited as a bread alternate?**

   A: Snack-type crackers may be served, but they must satisfy the criteria for crediting bread alternates:

   a. Whole-grain or enriched meal or flour is the predominant ingredient.
   b. It serves the customary function of bread in the meal.
   c. The serving size (the number of crackers needed to satisfy the weight requirement) is practical for the age group being served. A full serving for participants six years and older must have a minimum weight of 20 grams (0.7 ounce), and a half serving for children under six years old must weigh 10 grams (0.4 ounce). Also, keep in mind the fat, sugar, and salt content of the crackers chosen.

3. Q: **Which cereals are creditable in the CACFP?**

   A: The cereal served must be either **whole grain** or **enriched** or **fortified**. The Child Nutrition and Food Distribution Division does not publish a list of creditable or noncreditable cereals but recommends that selected cereals be low in sugar.

4. Q: **Is granola cereal an acceptable bread alternate?**

   A: Granola cereal, commercial and homemade, is an acceptable bread alternate for breakfast and supplements (snacks) only. However, only the grain portion of the cereal is creditable as a bread alternate. In other words, any nuts, seeds, coconut, dried fruit, and so on is not to be included when determining the serving size of either 1/3 cup or 1/2 ounce, whichever is less, for children aged three to six years (1/4 cup or 1/3 ounce for children aged one to three years).

5. Q: **How are cookies creditable in the CACFP?**

   A: Cookies are creditable as a bread alternate **for snacks only.** The Child Nutrition and Food Distribution Division recommends that cookies be served in a snack no more than twice a week. They may be used for snacks only when:

   a. Whole-grain or enriched meal or flour is the predominant ingredient by weight as specified on the label or according to the specific recipe; and
   b. The total weight of a serving for children under six years of age is a minimum of 18 grams (0.6 ounce) and for participants over six years, a minimum of 35 grams (1.2 ounces).

   These serving sizes do **not** include the weight of cookie filling for frosting. The Child Nutrition and Food Distribution Division does not publish a list of acceptable cookies but recommends that good judgment be used when selecting cookies to be served in the CACFP.

6. Q: **Are granola bars creditable in the CACFP?**

   A: Granola bars are credited as cookies as a bread alternate for snacks only. Whole-grain or enriched meal and/or flour must be the predominant ingredient by weight. Refer to question and answer number 5 for serving sizes.

7. Q: **Are batters and/or breadings creditable as bread alternates?**

A: Batters and/or breadings have been added to the list of creditable bread and bread alternates in the CACFP. These products may be used as bread alternates if (1) they are served as an accompaniment to or as an integral part of the main dish of the meal; and (2) if whole-grain or enriched flour or meal is the primary ingredient by weight. A full serving for participants six years and older is 20 grams (0.7 ounce) and for children under six years of age, it is 10 grams (0.4 ounce). To be credited, a product must contain at least a fourth of a serving of bread alternate by weight or 5 grams (0.2 ounce) of batter and/or breading.

8. Q: **How are corn tortillas and other corn products credited in the CACFP?**

A: When corn tortillas or other corn products are being credited as a bread alternate, whole-grain or enriched corn must be the primary ingredient by weight; or the product must be enriched in the preparation or processing and labeled "enriched." Use the following reference when reading the ingredient listing:

May be credited	*May be credited with verification*	*May not be credited*
Whole-grain corn Whole-ground corn Whole-germed corn Cornmeal Corn flour Enriched cornmeal Enriched corn flour Enriched corn grits	Corn*	Corn grits Degerminated corn

*When corn is listed in the ingredient statement, you must verify with the manufacturer that whole-grain corn is used.

9. Q: **Are there any requirements for corndog breading to be credited toward the bread requirement?**

A: Yes. To be credited toward the bread requirement, the cornmeal and enriched flour combined must make up a greater percentage of the batter than does the water. In other words, the cornmeal and enriched flour combined must be the primary ingredients by weight.

The breading is credited the same as crediting cornbread. The serving size for children under six years old is 13 grams (0.5 ounce); for participants six years and older, 25 grams (0.9 ounce).

10. Q: **How is bread stuffing credited in the CACFP?**

A: Homemade bread stuffing is credited as a bread alternate. The amount of bread in a serving of stuffing should weigh at least 13 grams (0.5 ounce). Quick-type boxed commercial stuffing mixes would be creditable only if it can be determined that each serving would provide 13 grams (0.5 ounce) of bread equivalent and the product is made with enriched or whole grain meal or flour as the predominant ingredient by weight.

11. Q: **Are main dish pie crusts creditable as bread alternates in the CACFP?**

A: Pie crust served as an accompaniment to, or as an integral part of, the main dish is a creditable bread alternate. The crust must be made with whole-grain or enriched flour as the primary ingredient by weight. Examples include meat pot pies and quiche.

12. Q: **Are puff pastry shells and popovers creditable as bread alternates in the CACFP?**

A: Yes. Puff pastry shells and popovers are creditable bread alternates for all meals as long as enriched or whole-grain meal or flour is the primary ingredient, and the shells and popovers serve the customary function of bread in a meal. For a lunch or a supper, they must be served as an accompaniment to, or as a recognizable integral part of, the main dish (not merely as an ingredient). The shell of a cream puff would not be credited as a bread because it is not an integral part of the main dish and does not serve the function of bread in a meal.

Puff pastry shells are credited in Group III of creditable breads and bread products. The serving size for children six years and older is 30 grams (1.1 ounces) and 15 grams (0.6 ounce) for children up to six years old.

13. Q: **Are pop tarts acceptable bread alternates?**

A: Pop tarts (toaster pastries) satisfy the bread requirement for breakfast and supplements only when (l) enriched or whole-grain flour is the predominant ingredient; and (2) the crust component weighs at least 20 grams (0.7 ounce) for children six years and older and 10 grams (0.4 ounce) for children under six years old. Jelly-filled or fruit-filled toaster pastries **do not** satisfy any part of the fruit/vegetable requirement for any **meal**.

14. Q: **May quick breads be served as acceptable bread alternates?**

A: Quick breads, such as pumpkin, zucchini, banana, and so on, may be credited as acceptable bread alternates if (l) the primary ingredient by weight is whole-grain or enriched flour; and (2) it serves the customary function of bread in a meal. A serving for children six years and older must have a minimum of 25 grams (0.9 ounce), and a serving for children under six years old must have a minimum weight of 13 grams (0.5 ounce).

15. Q: **Is pineapple upside-down cake creditable?**

A: No. Pineapple upside-down cake is a **cake** and is thus not creditable as a bread alternate. However, the pineapple may be credited toward satisfying part of the fruit/vegetable requirement. If credited, at least 1/8 cup of pineapple must be served to each child.

The rationale for this policy of crediting the pineapple as a fruit but not the cake as a bread is as follows. In our culture, bread is customarily served in a meal as an accompaniment to or as an integral part of the main dish and not as a dessert. Because we desire to maintain this role for bread as an example of good eating habits, only breads that are served with the meal are eligible to satisfy the bread requirement. Fruit, on the other hand, because it is typically served as a dessert in our culture, may be used in a dessert to satisfy the fruit/vegetable requirement.

To understand these policies, it is important to remember that the CACFP is intended to do more than just provide nutrients participants need. It is also an example of eating habits that we feel are desirable for children to develop. As a participant in the CACFP, you should use sound judgment when selecting foods to serve to children and adults.

16. Q: **May dessert pie crust be credited as a bread alternate?**

A: No. Dessert pie crusts do not satisfy the criteria for crediting bread items in the CACFP. They do not serve the customary function of bread in a meal. That is, they are not served as an accompaniment to, or as an integral part of, the main dish.

17. Q: **Are rice pudding and bread pudding creditable?**

A: A serving of rice used in rice pudding and bread used in bread pudding are both creditable for snacks only.

18. Q: **Are croutons a creditable bread alternate?**

A: Croutons made from enriched or whole-grain meal or flour as the primary ingredient are creditable as a bread alternate. Each serving for children under six years must weigh 10 grams (0.4 ounce). In addition, to be creditable at lunch or supper, the croutons must be served as an accompaniment to or a recognizable integral part of the main dish (not merely as an ingredient).

19. Q: **Is raisin bread, toasted or untoasted, creditable in the CACFP?**

A: Raisin toast and bread are creditable toward the bread requirement. The raisins in the bread are not creditable toward the fruit/vegetable requirement in any of the meals.

20. Q: **Are wafers a creditable bread in the CACFP?**

A: When serving wafers, specify the type on the menu.

Crackers, such as rye and wheat wafers, are creditable for all meals if the predominant ingredient by weight is enriched or whole-grain meal or flour. The serving size for children up to six years old should be a minimum of 10 grams (0.4 ounce), which is approximately two wafers.

Vanilla wafers are creditable cookies for snacks (supplements) but only when the predominant ingredient by weight (first ingredient listed on the package) is enriched or whole-grain meal or flour. The serving size for children under six years is a minimum of 18 grams; and for participants over six years, a minimum of 35 grams. The number of cookies it takes to satisfy the minimum requirement should be considered when selecting creditable cookies to serve in the CACFP. If the number is not reasonable, the cookies should not be served.

21. Q: **May nut or seed meal or flour be used to satisfy the bread/bread alternate requirement of a meal in child nutrition programs?**

A: No. Nuts and seeds are not grains, and there are no standards for these foods.

22. Q: **Are rice cakes creditable for a bread alternate for all meals?**

A: Yes. If the average 9-gram rice cake is used, three rice cakes are necessary to meet the minimum 20-gram requirement for one serving.

Table 14. Breads and Bread Alternates

Group A–Breads, Rolls, and Quick Breads

1/4 serving = 7 grams (0.2 oz.)
1/2 serving = 13 grams (0.5 oz.)
3/4 serving = 19 grams (0.7 oz.)
1 serving = 25 grams (0.9 oz.)

Bagels
Biscuits
Boston brown bread
Breads, sliced, all types (white, rye, whole wheat, raisin, quick breads, and so on)
Coffee cake (breakfast and snack only)
Corn bread
Croissants
Doughnuts (breakfast and snack only)
Egg roll/won ton wrappers
English muffins
French, Vienna, or Italian bread
Muffins
Pizza crust
Pretzels (soft)
Rolls and buns
Stuffing, bread (weights apply to the bread in the stuffing)
Sweet rolls and sweet buns (breakfast and snack only)
Syrian bread (pita)

Group B–Crackers and Low-moisture Breads

1/4 serving = 5 grams (0.2 oz.)
1/2 serving = 10 grams (0.4 oz.)
3/4 serving = 15 grams (0.5 oz.)
1 serving = 20 grams (0.7 oz.)

Batter and/or breading
Bread sticks (dry)
Chow mein noodles
Graham crackers
Melba toast
Rice cakes
Rye wafers
Saltine crackers
Soda crackers
Taco shells (whole, pieces)
Toaster pastries (breakfast and snack only)
Zwieback

Group C–Miscellaneous Items

1/4 serving = 8 grams (0.3 oz.)
1/2 serving = 15 grams (0.5 oz.)
3/4 serving = 22 grams (0.8 oz.)
1 serving = 30 grams (1.1 oz.)

Dumplings
Hush puppies
Meat/meat alternate
  Pie crust
  Turnover crust
Pancakes
Sopapillas
Spoonbread
Tortillas
Waffles

NOTE: Cookies, granola bars, and so on (snack only)—1/2 serving = 18 grams; 1 serving = 35 grams

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Group D–Pastas, Cereals, and Breakfast Cereals

1/4 serving = 1/8 cup cooked or 7 grams (0.2 oz.) dry
1/2 serving = 1/4 cup cooked or 13 grams (0.5 oz.) dry
3/4 serving = 3/8 cup cooked or 19 grams (0.7 oz.) dry
1 serving = 1/2 cup cooked or 25 grams (0.9 oz.) dry

Barley
Breakfast cereals cold, dry, or cooked (breakfast and snack only)
Bulgur
Corn grits
Lasagna noodles
Macaroni, spaghetti, and assorted pasta shapes
Millet
Noodles (egg)
Ravioli (pasta only)
Rice

NOTE: When any cereal grain is used as an ingredient in a bread or bread alternate, use the serving size given for the appropriate bread group. For example, a serving of oatmeal bread should weigh 25 grams (Group A). Some of the above foods, or their accompaniments, may contain more sugar, salt, and/or fat than others. Keep this in mind when considering how often to serve them.

Source: *Food Buying Guide for Child Nutrition Programs*, by Dorothy W. Davis and others. Washington, D.C.: U.S. Department of Agriculture, 1984. Used with permission.

Breads and Bread Alternates

1. Food as purchased	2. Purchase unit	3. Servings per purchase unit	4. Serving size or portion and contribution to the meal requirement	5. Additional yield information
BREAD (Group A)				
Sliced bread* (all types-white, rye, whole wheat, raisin, quick bread, and so on)	Pound	32.0	½ slice (13 g or 0.5 oz.) (½ bread serving)	Yield does not include end slices.
		16.0	1 slice (25 g or 0.9 oz.) (1 bread serving)	
BREAD STICKS (Group B)	Pound	45.3	2 sticks (10 g or 0.4 oz.) (½ bread serving)	
		22.6	4 sticks (20 g or 0.7 oz.) (1 bread serving)	7¾ inches long, ¾ inch diameter
CEREALS (Group D)				
BARLEY	Pound	42.0	¼ cup cooked	1 lb. dry = about 2-1/3 cups
		21.2	½ cup cooked	
		14.1	¾ cup cooked	
BULGUR	Pound	39.2	¼ cup cooked	1 lb. dry = about 3 cups
		19.6	½ cup cooked	
		13.0	¾ cup cooked	
CORNMEAL (yellow) Degerminated	Pound	50.7	¼ cup cooked	1 lb. dry = about 3 cups
		25.3	½ cup cooked	
		16.9	¾ cup cooked	
Stone ground	Pound	57.3	¼ cup cooked	1 lb. dry = about 3-3/8 cups
		28.6	½ cup cooked	
		19.1	¾ cup cooked	
CORN GRITS				
Instant	Pound	54.7	¼ cup cooked	1 lb. dry = about 5-3/4 cups
		27.4	½ cup cooked	
		18.2	¾ cup cooked	
Quick	Pound	45.0	¼ cup cooked	1 lb. dry = about 2-3/4 cups
		22.4	½ cup cooked	
		15.0	¾ cup cooked	
Regular	Pound	50.3	¼ cup cooked	1 lb. dry = about 2-3/4 cups
		25.1	½ cup cooked	
		16.7	¾ cup cooked	
FARINA				
Instant	Pound	45.5	¼ cup cooked	1 lb. dry = about 2-3/8 cups
		22.7	½ cup cooked	
		15.1	¾ cup cooked	
Quick	Pound	58.1	¼ cup cooked	1 lb. dry = about 2-1/2 cups
		29.0	½ cup cooked	
		19.3	¾ cup cooked	

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*The number per purchase unit does not include the end slices.

Breads and Bread Alternates

1. Food as purchased	2. Purchase unit	3. Servings per purchase unit	4. Serving size or portion and contribution to the meal requirement	5. Additional yield information
FARINA (Group D) (continued)				
Regular	Pound	58.9	¼ cup cooked	1 lb. dry = about 2-1/2 cups
		29.4	½ cup cooked	
		19.6	¾ cup cooked	
MILLET	Pound	41.6	¼ cup cooked	1 lb. dry = about 2-1/3 cups
		20.8	½ cup cooked	
		13.9	¾ cup cooked	
READY-TO-EAT (wheat, corn, rice, oats, granola)	Package	1.0	¾ cup or 1 ounce	Package contents vary with the cereal—flakes, puffs, biscuits, shreds, granules, and so on.
ROLLED OATS				
Instant and quick	Pound	47.0	¼ cup cooked	
		23.4	½ cup cooked	
		15.6	¾ cup cooked	
Regular	Pound	45.4	¼ cup cooked	1 lb. dry = about 6 cups
		22.7	½ cup cooked	
		15.1	¾ cup cooked	
ROLLED WHEAT	Pound	44.1	¼ cup cooked	1 lb. dry = about 4-3/4 cups
		22.0	½ cup cooked	
WHEAT CEREAL				
Instant	Pound	49.1	¼ cup cooked	1 lb. dry = about 4 cups
		24.5	½ cup cooked	
Regular	Pound	49.2	¼ cup cooked	1 lb. dry = about 3-1/3 cups
		24.6	½ cup cooked	
CHOW MEIN NOODLES (Group B)	Pound	34.8	¼-cup serving (11 g or 0.4 oz.)	
		17.4	½-cup serving (22 g or 0.8 oz.)	
CRACKERS (Group B)				
GRAHAM	Pound	32.4	2 crackers (14 g or 0.5 oz.) (½ bread serving)	Graham crackers made with honey are not allowed for children under two years of age.
		21.3	3 crackers (21 g or 0.7 oz.) (1 bread serving)	1 lb. AP = about 64 crackers
SALTINES	Pound	41.2	4 crackers (11 g or 0.4 oz.) (½ bread serving)	
		20.6	8 crackers (23 g or 0.8 oz.) (1 bread serving)	7 crackers minimum

Breads and Bread Alternates

1. Food as purchased	2. Purchase unit	3. Servings per purchase unit	4. Serving size or portion and contribution to the meal requirement	5. Additional yield information
CRACKERS, (Group B) (continued)				
SODA	Pound	45.0	2 crackers (10 g or 0.4 oz.) (½ bread serving)	
		22.5	4 crackers (20 g or 0.7 oz.) (1 bread serving)	
MELBA TOAST (Group B)	Pound	37.8	3 pieces (12 g or 0.4 oz.) (½ bread serving)	
		22.2	5 pieces (20 g or 0.7 oz.) (1 bread serving)	
PASTA (Group D)				
LASAGNA NOODLES	Pound	36.4	¼ cup cooked	1 lb. dry = about
		18.2	½ cup cooked	19 pieces
MACARONI				
Elbow				
Regular	Pound	39.0	¼ cup cooked	1 lb. dry = about
		19.5	½ cup cooked	3-1/2 cups
Protein-fortified	Pound	39.6	¼ cup cooked	1 lb. dry = about
		19.8	½ cup cooked	3-1/2 cups
Spiral	Pound	33.8	¼ cup cooked	1 lb. dry = about
		16.9	½ cup cooked	5-3/8 cups
NOODLES				
Egg, medium	Pound	40.3	¼ cup cooked	1 lb. dry = about
		20.1	½ cup cooked	11-7/8 cups
SPAGHETTI				
Regular	Pound	33.0	¼ cup cooked	1 lb. dry = about
		16.5	½ cup cooked	6-3/8 cups
Protein-fortified	Pound	47.3	¼ cup cooked	1 lb. dry = about
		23.6	½ cup cooked	3-3/4 cups
RICE (Group D)				
BROWN				
Long grain	Pound	39.1	¼ cup cooked	1 lb. dry = about
	Pound	19.5	½ cup cooked	2-1/2 cups
WHITE				
Long grain	Pound	35.9	¼ cup cooked	1 lb. dry = about
	Pound	17.9	½ cup cooked	2-1/3 cups
Medium	Pound	36.1	¼ cup cooked	1 lb. dry = about
	Pound	18.0	½ cup cooked	2-1/4 cups
Short	Pound	31.6	¼ cup cooked	1 lb. dry = about
	Pound	15.8	½ cup cooked	2-1/4 cups

1. Food as purchased	2. Purchase unit	3. Servings per purchase unit	4. Serving size or portion and contribution to the meal requirement	5. Additional yield information
RICE CAKES (Group B)	Package	5.3	3 each (27 g or 0.9 oz.) (1 bread serving)	
RYE WAFERS (Group B)	Pound	36.0	2 wafers (13 g or 0.5 oz.) (½ bread serving)	
		18.0	4 wafers (25 g or 0.9 oz.) (1 bread serving)	
TACO SHELLS (Group B)	Dozen	12.0	1 taco shell (10 g or 0.4 oz.) (½ bread serving)	
		6.0	2 taco shells (20 g or 0.8 oz.) (1 bread serving)	
TORTILLAS (Group C) (Must be made with whole grain or enriched flour)	Pound	26.6	1 tortilla (15 g or 0.6 oz.) (½ bread serving)	
		14.5	2 tortillas (30 g or 1.1 oz.) (1 bread serving)	
ZWIEBACK (Group B)	Pound	32.4	2 pieces (14 g or 0.5 oz.) (½ bread serving)	
		21.3	3 pieces (21 g or 0.7 oz.) (1 bread serving)	

Section 4

Milk

Section 4—Milk

Child and Adult Care Food Program's meal patterns for older children (one through twelve years of age) require that fresh fluid milk must be served with each breakfast, lunch, and supper. Fluid milk may be served as one of the two components of an a.m. or p.m. supplement. When milk is served, juice may not be served as the only other component. Milk supplies most of the calcium in the American diet. It also supplies riboflavin, protein, vitamin A, and other nutrients.

For breakfast or a supplement, fluid milk may be served as a beverage, on cereal, or both. For lunch and supper, the fluid milk must be served as a beverage. Milkshakes may be used to satisfy the milk requirement for lunch, supper, and supplements if they contain the minimum required quantity of fluid milk per serving appropriate for the age group served. Milk used to prepare items, such as pudding or baked goods, improves the nutritional quality of your meals but does not count toward satisfying the milk requirement.

The meal pattern for adults requires one serving a day of fluid milk. For adult participants, 8 ounces (1 cup) of yogurt, 1-1/2 ounces of natural cheese, or 2 ounces of processed cheese may be substituted to meet the milk requirement. When cheese is used to fulfill the dairy requirement, it may not be used as a meat alternate in the same meal service.

The following items should be remembered:

1. Fluid milk is defined as pasteurized unflavored or flavored skim, lowfat, or whole milk, acidified milk, or cultured buttermilk that satisfies state and local standards. For infants eight months up to one year of age, milk must be unflavored whole milk. All milk should contain vitamins A and D at levels specified by the U.S. Food and Drug Administration.
2. Lactose reduced milk may be served to children who cannot digest the lactose in milk.
3. Infants zero through seven months of age must be given breast milk or iron fortified infant formula, **not** whole cow's milk. See Section 8 for infant feeding information.

Questions and Answers About Milk

The following flavored or unflavored items are **creditable** as milk:

Buttermilk
Lowfat milk (1 percent, 2 percent, with or without added protein)
Pasteurized, fortified goat's milk
Skim milk (nonfat not recommended for children)
Whole milk
Chocolate milk

The following milk products may be credited if they are made with fluid milk or satisfy state and local standards for fluid milk:

Acidified milk (See question and answer number 5.)
Cultured milk (See question and answer number 6.)
Eggnog (See question and answer number 1.)
Kefir milk
Hot chocolate or cocoa (See question and answer number 2.)
Lactose-reduced milk (See question and answer number 4.)
Milkshakes (See question and answer number 3.)
Yogurt (adults)

The following items are **not creditable** as milk:

Cocoa mix
Cottage cheese
Cream
Cream cheese
Cream sauces
Cream soups
Custard
Evaporated milk (except for infants eight months up to one year)
Half and half
Ice cream
Ice milk
Imitation milk (Meadow Fresh®, Prim®, Royal American®, and so on)
Nonfat dry milk (See question and answer number 10.)
Pudding
Pudding pops (See question and answer number 9.)
Sherbet
Sour cream
Yogurt (infants and children)

1. Q: **Is eggnog creditable in the CACFP?**

   A: Yes. Homemade eggnog made with fluid milk is creditable toward the milk requirement in the CACFP. However, **only** the fluid milk portion is creditable. Thus, to determine the creditable portion size, the amount of milk in each serving must be determined. It is recommended that you use **only** cooked eggnog.

2. Q: **Are hot chocolate and cocoa creditable in the CACFP?**

   A: Yes. Hot chocolate and cocoa made with fluid milk are creditable in the CACFP.

3. Q: **Are milkshakes creditable in the CACFP?**

   A: Milkshakes made with fluid milk may be used to satisfy the milk requirement for lunches, suppers, and supplements in the CACFP. The milkshakes must contain the minimum required quantity of fluid milk per serving appropriate for the age group being served.

4. Q: **What is lactose-reduced milk? Is it creditable in the CACFP?**

   A: Lactose-reduced milk is a fluid milk modified by the addition of lactase enzymes. The lactose (milk sugar) in this milk has been broken down into simple sugars. People who cannot digest the lactose in milk may benefit from a lactose-reduced milk. Lactose-reduced milk is creditable in the CACFP.

5. Q: **What is acidified milk? Is it creditable in the CACFP?**

   A: Acidified milk is produced by souring fluid whole, lowfat, or skim milk with an acidifying agent. Examples of acidified milk are acidified kefir milk and acidified acidophilus milk. Acidified milk is creditable in the CACFP.

6. Q: **What is cultured milk? Is it creditable in the CACFP?**

   A: Cultured milk is produced by adding selected microorganisms to fluid whole, lowfat, or skim milk under controlled conditions to produce a product with specific flavor and/or consistency. Examples of cultured milk are cultured buttermilk, cultured kefir milk, and cultured acidophilus milk. Cultured milk is creditable in the CACFP.

7. Q: **What must I do if a participant cannot have milk?**

   A: You must obtain a written statement from a recognized medical authority stating that the participant should not be served milk. The statement must specify substitute beverages or foods. (See Appendix D.)

8. Q: **May milk be purchased directly from a farm?**

   A: Yes, as long as it is **pasteurized** fluid milk that satisfies state and local health standards.

9. Q: **Are pudding pops creditable?**

   A: No. Even though pudding pops contain milk, they may not be creditable because only fluid milk served as a beverage or on cereal is creditable.

10. Q: **Why is reconstituted dry milk not creditable as fluid milk?**

    A: Reconstituted milk is not included in the definition of milk in the program regulations.

    Dry milk shall be used **only** when an institution is unable to obtain a supply of fluid milk on a continuing basis or in the case of a declared emergency. The Child Nutrition and Food Distribution Division, California Department of Education, may approve service of meals without fluid milk, provided that an equivalent amount of canned, whole dry, or nonfat dry milk is used in the preparation of the components of the meal. Prior approval must be obtained. (CFR Part 226.20 [e, f])

11. Q: **May dry milk powder be mixed with fluid milk and served to satisfy the milk requirement?**

    A: Yes. However, the required amount of fluid milk for the appropriate age group must be used. While the addition of dry milk powder does increase the nutrient content of the fluid milk, it is not credited toward satisfying any part of the meal requirements. This mixture shall not be used to satisfy the infant formula or whole milk requirement for infants zero through twelve months of age.

12. Q: **May a provider withhold milk from an infant or child because he or she has a cold and the parent claims milk causes a problem with phlegm?**

    A: No. The provider may not do so unless the parent presents a medical statement from the child's doctor that the infant or child should not consume milk for a specific length of time. This statement should contain suggested substitute fluids or foods.

Table 15

Fresh Fluid Milk

Food as purchased	*Purchase unit*	*Servings per purchase unit*		
		1/2 cup	*3/4 cup*	*1 cup*
Fluid Milk	gallon	32	21	16
	1/2 gallon	16	10.6	8
	quart	8	5.3	4
	1/2 pint	2	1.3	1

Sources of Calcium

Participants unable to drink milk need to be given foods that will provide the calcium essential to the formation of sound bones and teeth. Table 16, "Sources of Calcium," will help you to plan and serve common calcium-containing foods.

Table 16

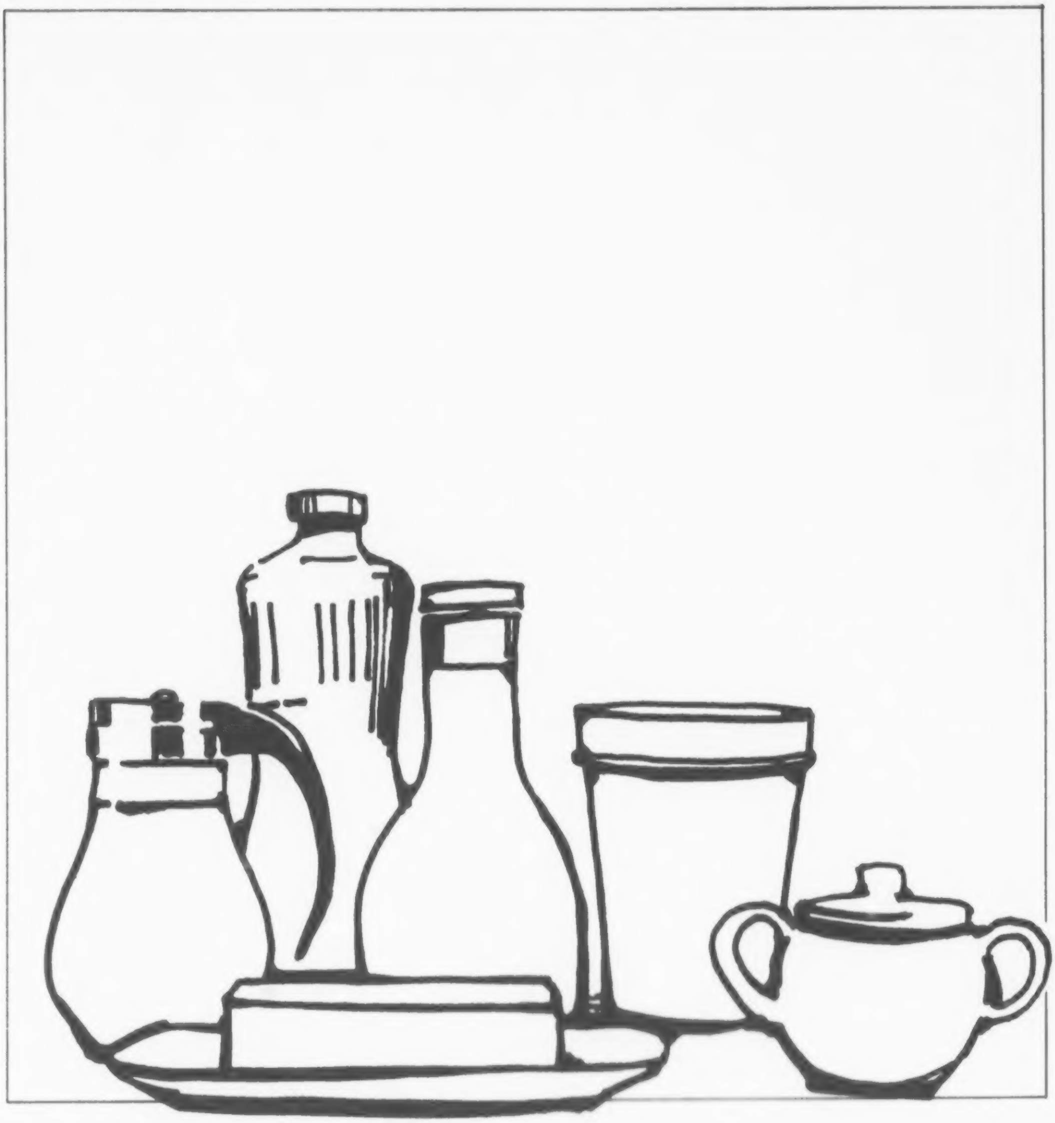
Sources of Calcium

Food	Serving size	Calcium (mg)
Cheese, swiss	1 oz.	262
Cheese, cheddar	1 oz.	213
Yogurt	1/2 c.	136
Sardines with bones	1 oz.	124
Corn muffin	1	96
Collard greens	1/4 c.	72
Dandelion greens	1/4 c.	63
Creamed cottage cheese	1/4 c.	58
Pancake	1	58
Canned salmon with bones	1 oz.	56
Oysters	1/4 c.	56
Orange	1	54
Spinach	1/4 c.	53
Mustard greens	1/4 c.	48
Muffin	1	42
Tangerine	1	34
Cream, light	2 Tbsp.	30
Egg	1	27
Dried fig	1	26
Whole-wheat bread	1 slice	25
Broccoli	1/4 c.	24
Dried beans	1/4 c.	22
White bread	1 slice	21
Lima beans	1/4 c.	20
Pink grapefruit	1/2	20
Rye bread	1 slice	19
White grapefruit	1/2	19
Peanut butter	2 Tbsp.	18
Cabbage	1/4 c.	16
Green beans	1/4 c.	16
Hamburger bun	1/2	15
Pumpkin	1/4 c.	14.3
Cantaloupe	1/4	14
Sweet potatoes	1/4 c.	14
Winter squash	1/4 c.	14
Summer squash	1/4 c.	13
Turnips	1/4 c.	13
Brussels sprouts	1/4 c.	12
Carrots	1/4 c.	12
Mashed potato	1/4 c.	12
Onions	1/4 c.	12
Blackberries	1/4 c.	11
Green peas	1/4 c.	9
Asparagus	1/4 c.	8
Raspberries	1/4 c.	7
Chipped beef	1 oz.	6
Strawberries	1/4 c.	6

Source: *Nutrition: Concepts and Controversies*, by Eva May Hamilton and Eleanor Whitney. St. Paul: West Publishing Company, 1979. Used with permission.

Section 5

Other Foods



Section 5—Other Foods

A food that does not satisfy a requirement for any of the four meal pattern components is a so-called "other food." Tofu, which adds variety and some nutrients to a meal, or pickle relish, which is considered a condiment, are examples of "other foods."

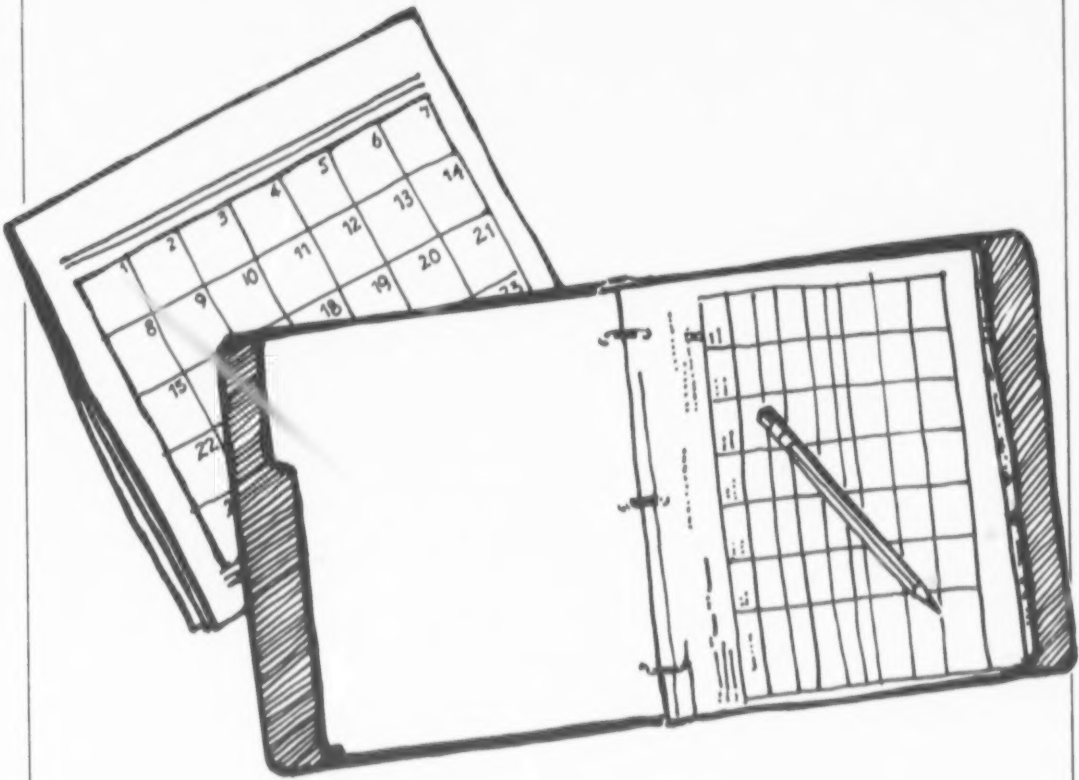
"Other foods" may be listed on the menu and included on the menu production work sheets but will not be counted toward satisfying any meal pattern component.

The following items are some examples of "other foods":

- **Bacon**
- **Butter and margarine**
- **Candies**
- **Catsup**
- **Chili sauce**
- **Coconut**
- **Dairy Products**
  - **Cream**
  - **Cream cheese**
  - **Dry milk**
  - **Ice cream, ice milk, sherbet**
- **Gelatin**
- **Hominy**
- **Jams and jellies**
- **Juice drinks and powders**
- **Mayonnaise type dressings**
- **Mustards**
- **Nuts—(acorns, chestnuts, and coconuts)**
- **Pickle relish**
- **Popcorn**
- **Salad dressings**
- **Seasonings**
- **Snack chips and sticks**
- **Soy milk**
- **Syrups**
- **Tofu**
- **Yeast**

Section 6

Menu Records



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Section 6—Menu Records

Menu records are documents that show that you have followed CACFP meal pattern regulations and policies. Sponsors may develop and use any form that provides the information required for review and audit purposes. The record must include:

1. Name of center or care provider
2. Date—month, day, and year
3. Type of meal service (breakfast, lunch, supper, a.m. or p.m. supplement)
4. Number of participants planned for, by age groups, as shown in the CACFP meal patterns for infants, older children, and adults
5. Number of program adults planned for
6. Meal components served
7. Quantities of foods planned and served that satisfy the minimum CACFP meal pattern requirements for the numbers and age groups served
8. Leftovers, if they are to be used in another reimbursable meal service

Note: Menu record forms are to be filled out daily.

The *Simplified Buying Guide* is the resource that will enable you to plan the amounts of foods you need to purchase and prepare to satisfy the minimum CACFP meal pattern requirements.

This section of the guide contains three menu record forms with instructions:

Example 1: "Menu Production Record—Child and Adult Care Centers" (form 6277)

Example 2: "Menu Production Record for Child and Adult Care Centers" (CACFP 10/80), issued by USDA

Example 3: "Attendance, Meal Count, and Menu Record Sheet for Day-Care Home Providers" (Form 6278)

Questions and Answers About Menu Records

1. Q: **When the foods used on the menu production work sheets are being documented, how should an agency record very small quantities? Should the agency use measurements such as tablespoons, cups, ounces, and so on? For example, should the agency record two apples, one cup of apples, or 0.63 lb. of apples?**

A: Use the most logical measurement that describes the quantity in terms that relate to the requirements and/or purchase unit found in the *Simplified Buying Guide*.

Example 1—Apples

Apples are purchased by the pound. Table 13 shows how many one-quarter-cup portions there are in one pound. *Two apples* describes the number of apples but not the quantity in terms of one-quarter-cup portions or pounds. *One cup* of apples is not an accurate measurement unless the apples have been chopped finely and measured in a dry measuring cup. Therefore, *two apples* should be recorded on the menu production work sheet in pounds or a fraction thereof.

Example 2—Applesauce

Applesauce is a different form of the same food and is commonly purchased in cans. Cans come in various sizes that contain a standard number of cups (No. 2 1/2 can = approximately 3 1/2 cups; No. 10 can = approximately 12 cups). Table 13 shows the number of one-quarter-cup portions in each size can listed. Applesauce should be recorded in terms of can size. Leftovers may be recorded as parts of a can, but a more accurate measure would be the number of cups. Homemade applesauce should be recorded in cups. For example, foods prepared: two No. 10 cans or one No. 2 1/2 can; leftovers: three cups or one and one-half cups.

2. Q: **What is the definition of a leftover that must be recorded on the menu production work sheet?**

   A: Leftovers should be documented when there is a sufficient quantity that will be served and counted toward satisfying the meal pattern requirements at a later meal service. Leftovers must be handled in a sanitary manner and must be properly stored.

Example 1: Instructions for "Menu Production Record—Child and Adult Care Centers" (Form 6277)

In the "Menu Production Record—Child and Adult Care Centers" (Form 6277), fill in the name of the center or care provider and date. Do the following to complete the form, as shown in the example below:

1. Plan menus in advance. See the "Checklist for Menu Design Principles" (Appendix E) and "Menu Production Record—Child and Adult Care Centers" (Appendix F).
2. List the foods needed to satisfy the minimum meal component requirements. "Other foods" may be listed to provide a complete menu for the meal.
3. Determine the number of participants to be served, by age group, and the number of program adults who will be served. (Meals served to program adults cannot be claimed for reimbursement but are considered a program cost.) Decide which portion size will be prepared for the program adults and note. Also write *no milk* if adults in the program are not served milk. **This example shows that adults in the program will be served the three- to six-year-old portion.**
4. Calculate the total amounts of food needed to satisfy the minimum meal pattern requirements for each component. Always refer to the CACFP meal pattern when planning quantities. See tables 3A (page 5) and 3B (page 6). You may prepare and serve more than the minimum quantities that the CACFP requires if you so desire.

Menu Production Record—Child and Adult Care Centers
Child and Adult Care Food Program
Form 6277

Name: JANE SMITH Date: 8/11/91

Number served	*Menu*	*Required components*	*Name of food used*	*Total amount prepared*	*Total amount left over*
1–3 yrs _____ 3–6 yrs _____ 6–12 yrs _____ Adults: _____ **Total:** _____	**Breakfast:**	Juice, fruit, or vegetable			
		Bread, bread equivalent, or cereal			
		Milk			

(Continued on next page)

Form 6277 (Continued)

Number served	Menu	Required components	Name of food used	Total amount prepared	Total amount left over
1–3 yrs ____ 3–6 yrs ____ 6–12 yrs ____ Adults: ____ **Total:** ____	**A.M. Supplement:** (Serve 2 of these 4)	Meat or meat alternate			
		Fruit or vegetable			
		Bread or equivalent			
		Milk			
1–3 yrs ③ 5 3–6 yrs 13 6–12 yrs 4 Adults*: 5 **Total:** 27	**Lunch or Supper:** ① BAKED CHICKEN MASHED POTATOES BROCCOLI HOT ROLL MILK	Meat or meat alternate	② CHICKEN, THIGHS	④ 6 LBS.	
		Fruit or vegetable	POTATOES, FRESH	3.2 LBS.	
		Fruit or vegetable	BROCCOLI, FRESH	3 LBS.	
		Bread or equivalent	HOT ROLLS	1 EACH	
		Milk	MILK	2-½ GAL.	4 CUPS
1–3 yrs ____ 3–6 yrs ____ 6–12 yrs ____ Adults: ____ **Total:** ____	**P.M. Supplement:**	Meat or meat alternate			
		Fruit or vegetable			
		Bread or equivalent			
		Milk			

* In this example adults receive the same portions as 3—6 year olds, but no milk.

Meat and Meat Alternates

A. Requirements

Age	Number served	Lunch requirement for meat
1–3	5	1 ounce
3–6	13	1 1/2 or 1.5 ounces
6–12	4	2 ounces
Adults (served same portion as 3–6 year olds)	5	1 1/2 or 1.5 ounces

1. Find *chicken, fresh or frozen,* in Table 12 (purchase unit [column 2] equals pound).
2. Find *thighs.* The guide shows 1 pound of chicken thighs equals 6.8 1-ounce servings.

How many one-ounce servings do you need?

B. Calculations

5 × 1 (ounces meat) = 5.0
13 × 1.5 (ounces meat) = 19.5
4 × 2 (ounces meat) = 8.0
5 × 1.5 (ounces meat) = 7.5

Total = 40.0 ounces

The minimum quantity of chicken thighs required to satisfy the meal pattern requirements is 40 1-ounce servings **after** preparation.

C. To determine the number of pounds of chicken to purchase and prepare (pounds equals purchase unit), divide the factor (column 3 in Table 12) for 1 ounce into the number of 1-ounce servings needed.

$$\begin{array}{rl} & \mathbf{5.88} \\ 6.8 \text{ (factor from guide)} & \overline{)40.00} \text{ (number of one-ounce servings needed)} \\ & \underline{340} \\ & 600 \\ & \underline{544} \\ & 560 \\ & \underline{544} \\ & 16 \end{array}$$

D. Answer = 5.88 lbs. Round to 6 pounds. Enter on your menu production record as shown on page 78.

Fruits and Vegetables

A. Requirements

Age	*Number served*	*Lunch requirement for fruits/vegetables*
1–3	5	1/4 cup
3–6	13	1/2 cup
6–12	4	3/4 cup
Adults (served same portion as 3–6 year olds)	5	1/2 cup

You are required to serve a minimum of two fruits and/or vegetables for lunch or supper. In this example each of the vegetables will satisfy half of the requirement. *Note:* a minimum of 1/8 cup must be served to be counted as a part of the requirements. If you serve an item that is new, you may wish to serve this small quantity along with the other fruits and vegetables that are more familiar. Do the following:

1. Find *potatoes, white* in Table 13 (purchase unit [column 2] equals pound).
2. Find the *fresh, mashed, cooked* entry. The guide shows 1 pound of mashed potatoes equals 8.4 servings (1/4-cup each).
3. Find *broccoli* in Table 13 (purchase unit [column 2] equals pound).
4. Find *fresh cooked broccoli*. The guide shows 1 pound of cooked broccoli equals 9.4 servings (1/4 cup each).

The guide uses 1/4 cup as the common factor for fruits and vegetables. How many 1/4-cup servings do you need?

B. Calculations

5 × 1 (1/4 cup) = 5
13 × 2 (1/4 cup) = 26
4 × 3 (1/4 cup) = 12
5 × 2 (1/4 cup) = 10
Total = 53 servings (1/4 each)

The minimum quantity of fruit/vegetable required to satisfy the meal pattern requirements is 53 servings (1/4 cup each) **after** preparation.

As each vegetable in this example will satisfy one-half the requirement, divide the required amount by 2.

$$\begin{array}{rl} 26.5 & \textbf{servings (1/4 cup each) needed} \\ 2\,\overline{)\,53} & \\ \underline{4} & \\ 13 & \\ \underline{12} & \\ 10 & \end{array}$$

Potatoes

C. To determine the number of pounds of potatoes to purchase and prepare (pounds equals purchase unit), divide the factor (column 3) for 1/4-cup servings into the number of 1/4-cup servings needed.

$$\begin{array}{rl} & \textbf{3.154 pounds} \\ \text{Potatoes: 8.4 (factor from guide)} & \overline{)\,26.50} \text{ servings (1/4 cup each) needed} \\ & \underline{252} \\ & 130 \\ & \underline{84} \\ & 460 \\ & \underline{420} \\ & 400 \end{array}$$

D. Round to 3.2 pounds of fresh potatoes. Enter on the menu production record (as shown in the example on page 78).

Broccoli

E. Follow the same procedure using the factor for broccoli.

$$\begin{array}{rl} & \textbf{2.81} \\ \text{Broccoli: 9.4 (factor from guide)} & \overline{)\,26.50} \text{ servings (1/4 cup each) needed} \\ & \underline{188} \\ & 770 \\ & \underline{752} \\ & 180 \\ & \underline{94} \\ & 86 \end{array}$$

F. Round to 3 pounds of fresh broccoli. Enter on the menu production record (as shown in the example on page 78).

Bread and Bread Alternates

A. Requirements

Age	*Number served*	*Lunch requirement for rolls*
1–3	5	1/2 serving
3–6	13	1/2 serving
6–12	4	1 serving
Adults (served same portion as 3–6 year olds)	5	1/2 serving

Breads and bread alternates are broken into four categories based on iron and moisture content. Review the breads and bread alternates (Section 3 of the Guide) in order to understand how each type of product is to be measured. Example: Pastas are measured by cup, whereas rolls are measured by weight.

Find *rolls* in the Bread/Bread Alternates table (Table 14, Group A). Serving size is determined by weight. The table provides the weight for 1/4, 1/2, 3/4, and 1 serving. Because the smallest serving size in this example is 1/2 serving, use that as your common factor. Two methods may be used:

How many total ounces do you need? **Or** how many rolls weighing a minimum of 0.5 ounce each do you need?

B. Calculations

Method 1

5 × 1 (1/2 serving) = 5
13 × 1 (1/2 serving) = 13
4 × 2 (1/2 serving) = 8
5 × 1 (1/2 serving) = 5
Total = 31—1/2 servings

If 1/2 serving equals 0.5 ounce, then 31—1/2 servings equal 31
× 0.5
Total = 15.5 ounces

Round to 1 pound.

Enter on your menu production record (as shown in the example on page 78).

Method 2

Develop a standardized recipe for a specific number of rolls that will weigh a minimum of 0.9 ounce (1 serving) each. You may then serve one roll to each child or break the rolls in half (1/2 serving) for the younger children, who may not wish to eat a full roll. This is the simplest method to use.

Milk

A. Requirements

Age	*Number served*	*Lunch requirement for milk*
1–3	5	1/2 cup
3–6	13	3/4 cup
6–12	4	1 cup
Adults	No milk served to adults in the program	0 cup

Find the Fresh Fluid Milk table (Table 15).

In this example, we will plan for the use of 1/2-gallon milk containers. The guide shows 1/2 cup as the common factor.

How many 1/2-cup servings do you need to satisfy minimum requirements?

B. Calculations

5 × 1 (1/2 cup) = 5
13 × 1.5 (1/2 cup) = 19.5
4 × 2 (1/2 cup) = 8
Adults = 0
Total = 32.5 servings (1/2 cup each) needed

The minimum quantity of milk needed to satisfy the meal pattern requirements is 32.5—1/2-cup servings. Round up to 33.

C. To determine the number of 1/2-gallon containers (1/2 gallon equals purchase unit) needed, divide the factor for the number of 1/2-cup servings in 1/2 gallon into the number of 1/2-cup servings needed.

$$\begin{array}{r l} & \;\;\textbf{2.0} \\ \text{16 (factor from guide)} & \overline{\big)\,33.0\text{—}1/2}\ \text{cups needed} \\ & \;\;\underline{32} \\ & \;\;\;10 \end{array}$$

The minimum number of 1/2-gallon containers needed to satisfy the minimum requirement is two. Clearly indicate the container size on the menu record sheet (example one). For example, enter 2—1/2 gal., not 2 1/2 gal., which appears to mean 2 and 1/2 gallons. You may enter the total amount as 1 gallon.

D. Enter on the menu production record (page 78). Review the checklist for requirements and recommendations (see Appendix G).

Leftovers

Record leftover food and milk if it is going to be served at a future meal service and counted toward the minimum requirements. In Example 1, Instructions for "Menu Production Record—Child and Adult Care Centers," 4 cups of milk have been recorded in the "left over" column. That amount of milk is enough to contribute 8—1/2-cup servings at another meal service.

If the quantity of a leftover is small, you may wish to serve it as an extra food at meal or snack time and not count it toward satisfying the requirements. If you choose to serve it as an extra food, you do not have to record it on the form.

Example 2: Instructions for "Menu Production Record for Child and Adult Care Centers"

The process is exactly the same as for Example 1. However, this form includes the multipliers needed to determine how many of the common factors you need; i.e., 1 ounce, 1/4 cup, and so on (Appendix H).

Breakfast has been calculated for the same number and ages of children and adults as in Example 1. **However, this form assumes you will plan the six- to twelve-year-old portion for adults.** If you wish to plan for another portion size (such as three- to six-year-old), add the number of program adults with the appropriate age group as shown in the following example.

Menu Production Record for Child and Adult Care Centers

Breakfast and Meal Supplements

Date: ____________
Total Served[1]: ____________

Breakfast component requirements[1]	Menu[1] PEACHES, CANNED CREAM OF WHEAT MILK AGE FACTOR	Number of units	Market unit	Servings per market unit	Food amount needed	Food amount used[1]	Leftovers to be reused
1. Fruit/ Vegetable or Full-Strength Juice	1-3 5 × 1 = 5 + 3-6 18 × 2 = 36 + 6-12[2] 4 × 2 = 8 + =	1/4 c					
	CANNED PEACHES, SLICED	49	#2½	13	4 cans		

Note: Milk and juice may not be served together at one supplement

[1] Required information to qualify for USDA reimbursement

[2] Include adults in ages 6—12 count

(Continued on next page)

Example 2
(Continued)

Breakfast component requirements[1]	Menu[1] PEACHES, CANNED CREAM OF WHEAT MILK AGE FACTOR	Number of units	Market unit	Servings per market unit	Food amount needed	Food amount used[1]	Leftovers to be reused
1. Bread/Bread Alternate or cooked pasta or grains. Dry cereal: Multiply by 1, 1.2, 3	1-3 5 × 1 = 5 + 3-6 18 × 1 = 18 + 6-12[2] 4 × 2 = 8 + =	1/2 sl.					
	CREAM OF WHEAT REGULAR	31	POUND	49.2	.6 lb		
1. Fluid Milk WHOLE	1-3 5 × 1 = 5 + 3-6 13 × 1.5 = 19.5 + 6-12[2] 4 × 2 = 8 + =	1/2 c.					
	MILK - WHOLE	32.5	½ GAL	16	2		
4. Other							

Menu[1]	Age	Milk and bread	Meat	Fruit/vegetable
AM supplement	1-6 ____ 6-12[2] ____ Total ____	× 1 = ____ × 2 = ____ ____	× .5 = ____ × 1 = ____ ____	× 2 = ____ × 3 = ____ ____
Total served[1]:				
PM supplement	1-6 ____ 6-12[2] ____ Total ____	× 1 = ____ × 2 = ____ ____	× .5 = ____ × 1 = ____ ____	× 2 = ____ × 3 = ____ ____
Total served[1]:	Units	(½ c) (½ sl)	(1 oz.)	(¼ c)

Choose any two of the four components[1] for each supplement			Number of units	Market unit	Servings per market unit	Food amount needed	Food amount used[1]	Leftover to be reused
1. Milk	a.m.							
	p.m.							
2. Bread/ bread alternate	a.m.							
	p.m.							
3. Meat/ meat alternate	a.m.							
	p.m.							
4. Full-strength juice, fruit, or vegetable	a.m.							
	p.m.							

Lunch and Supper **Date:** ________

Menu[1]		③ Number of servings planned	Total served[1]
Main Dish ①	________	Children:	
Vegetable/Fruit	________	Ages 1-3 ____	____
	________	Ages 3-6 ____	____
Bread/Bread Alternate	________	Ages 6-12 ____	____
	________	Adults + ____	____
Milk	________	6-12[2] = ____	
Other	________		____

(Continued on next page)

Note: Milk and juice may not be served together at one supplement.

[1] Required information to qualify for USDA reimbursement.

[2] Include adults in ages 6—12 count.

Example 2:
(Continued)

Four component requirements[1]	② Food items		Number of units	Market unit	Servings per market unit	④ Food amount needed	Food amount used[1]	Leftovers to be reused
	Age	Factor						
1. Meat or meat alternate	1-3 ________ × 3-6 ________ × 6-12[2] ________ ×	1 = ________ + 1.5 = ________ + 2 = ________ + =	1 oz.					
Used in main dish or main dish and one other menu item								
2. Vegetables and/or fruits	1-3 ________ × 3-6 ________ × 6-12[2] ________ ×	1 = ________ + 2 = ________ + 3 = ________ + =	1/4 c					
Two or more								
3. Bread or bread alternate	1-3 ________ × 3-6 ________ × 6-12[2] ________ ×	1 = ________ + 1 = ________ + 2 = ________ + =	1/2 sl.					
or cooked pasta or grains								
4. Fluid milk	Use "Number of Units" from meat/meat alternate		1/2 c.					
5. Other								

[1] Required information to qualify for USDA reimbursement

[2] Includes adults in ages 6–12 count

CACFP (10/80)

Fruits and Vegetables

A. Requirements

Age	*Number served*	*Breakfast requirement for fruits/vegetables*
1–3	5	1/4 cup
3–6	13	1/2 cup
6–12	4	1/2 cup
Adults (served same portion as 3–6 year olds)	5	1/2 cup

Find *peaches, canned, diced,* in Table 13 (purchase unit [column 2] equals pound, No. 2 1/2 or No. 10 cans). Which can size is most practical? The guide uses 1/4 cup as the common factor for fruits and vegetables.

B. Calculations can be done directly on the menu record sheet (Example 2), giving a total of: 5 + 36 + 8 = 49—1/4-cup servings needed to satisfy minimum requirements.

Look at the different types of canned peaches you may choose from and decide which type is the best buy.

Example:

Canned, diced No. 10 can equals 48.7—1/4-cup servings; or canned, sliced No. 2 1/2 can equals 13—1/4-cup servings

$$\begin{array}{r} 3.7 \\ 13\overline{)49} \\ \underline{39} \\ 100 \\ \underline{91} \\ 9 \end{array}$$

or four cans that would contain 13 x 4 = 52—1/4-cup servings. You would satisfy the requirement and have three extra servings.

What is the cost difference?

For this example, we will choose the No. 2 1/2 can.

C. Enter the market unit, servings per market unit, food amount needed, and food amount used on the menu production record (page 82).

Bread and Bread Alternates

Although the measurements for bread and bread alternates may vary from cup to slice to weight, the multipliers stay the same with the exception of cold, dry cereal.

A. Requirements

Age	*Number served*	*Breakfast requirement for cooked cereal*
1–3	5	1/4 cup
3–6	13	1/4 cup
6–12	4	1/2 cup
Adults (served same portion as 3–6 year olds)	5	1/4 cup

1. Find *wheat cereal* in Table 14. Because 1/4 cup is the common factor in this example, use the factor for 1/4-cup servings.
2. The purchase unit (column 2) is pound.
3. Find *wheat cereal, regular*. The guide shows 1 pound of cereal equals 49.2—1/4-cup servings.

How many 1/4-cup servings do you need?

B. Calculations

Example 2 shows a factor of 1/2 slice. Mark in 1/4 cup, which is the common factor for cooked cereal. The multipliers are the same.

Calculations can be done on the form. The minimum quantity of hot cereal required to satisfy the meal pattern requirements is 31—1/4-cup servings after preparation.

To determine the number of pounds of cereal to purchase and prepare (pounds equals purchase unit), divide the factor (column 3) for 1/4-cup servings into the number of 1/4-cup servings needed.

0.63 pound
49.2 (factor from guide) 31.00—1/4 cups needed
2952
1480
1476
4

0.6 pounds or 16 ounces × 0 .6 = 9.6 oz.

C. You may round to 10 ounces = 1 1/4 cups, dry; or = 20 tablespoons. Enter on the form.

Milk

A. Requirements

Age	*Number served*	*Breakfast requirement for milk*
1–3	5	1/2 cup
3–6	13	3/4 cup
6–12	4	1 cup
Adults	No milk served to adults.	0 cup

Find the Fresh Fluid Milk table, Table 15. This form uses 1/2 cup as the common factor, as does the guide. We will plan for the use of 1/2-gallon milk containers.

How many 1/2-cup servings do you need to satisfy minimum requirements?

B. Calculations

Example 2 on page 83 shows 1/2 cup as the common factor. Calculations can be done on the form. The minimum quantity of fluid milk required to satisfy the meal pattern requirements is 32.5—1/2-cup servings. Round to 33.

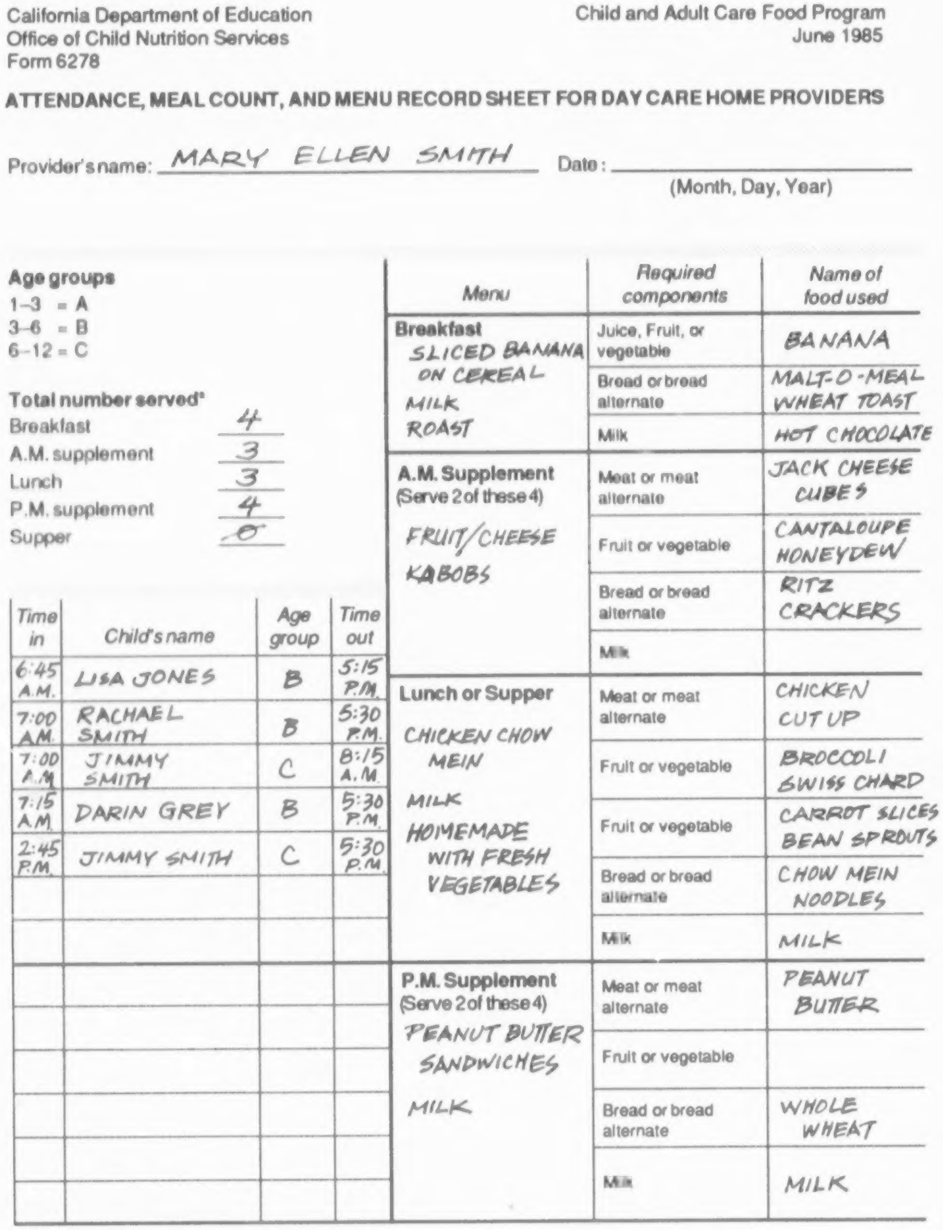
C. To determine the number of 1/2-gallon containers (1/2 gallon = purchase unit) needed, divide the factor for the number of 1/2-cup servings in 1/2 gallon into the number of 1/2-cup servings needed.

2.0
16 (factor from guide) 33.0—1/2 cups needed
32
10

The minimum number of 1/2-gallon containers needed to satisfy minimum requirements is two. Review the checklist for requirements and recommendations (See Appendix G).

Example 3: "Attendance, Meal Count, and Menu Record Sheet for Day Care Home Providers" (See Appendix I.)

Day care home providers are not required to keep as detailed a menu record as child and adult care centers. The menu(s) and types of foods must be listed. **Although the amounts of foods prepared and served are not recorded on Example 3, "Attendance, Meal Count, and Menu Record Sheet for Day Care Home Providers," day care home providers are required to plan, prepare, and serve the kinds and amounts of food needed to satisfy the minimum CACFP meal pattern requirements.**



California Department of Education
Office of Child Nutrition Services
Form 6278

Child and Adult Care Food Program
June 1985

ATTENDANCE, MEAL COUNT, AND MENU RECORD SHEET FOR DAY CARE HOME PROVIDERS

Provider's name: MARY ELLEN SMITH Date: ______ (Month, Day, Year)

Age groups
1–3 = A
3–6 = B
6–12 = C

Total number served*

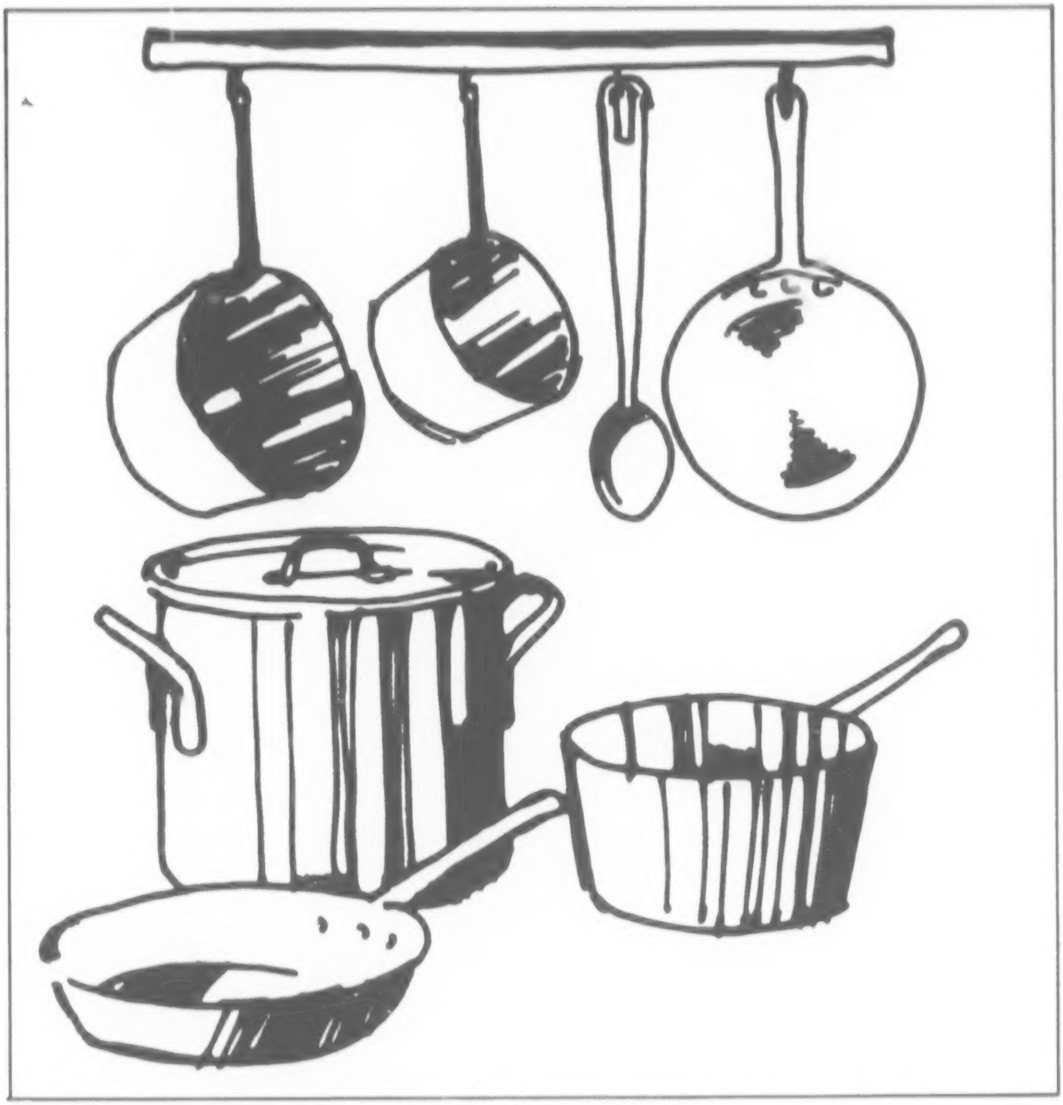
Breakfast	4
A.M. supplement	3
Lunch	3
P.M. supplement	4
Supper	0

Time in	Child's name	Age group	Time out
6:45 A.M.	LISA JONES	B	5:15 P.M.
7:00 A.M.	RACHAEL SMITH	B	5:30 P.M.
7:00 A.M.	JIMMY SMITH	C	8:15 A.M.
7:15 A.M.	DARIN GREY	B	5:30 P.M.
2:45 P.M.	JIMMY SMITH	C	5:30 P.M.

Menu	Required components	Name of food used
Breakfast SLICED BANANA ON CEREAL MILK ROAST	Juice, Fruit, or vegetable	BANANA
	Bread or bread alternate	MALT-O-MEAL WHEAT TOAST
	Milk	HOT CHOCOLATE
A.M. Supplement (Serve 2 of these 4) FRUIT/CHEESE KABOBS	Meat or meat alternate	JACK CHEESE CUBES
	Fruit or vegetable	CANTALOUPE HONEYDEW
	Bread or bread alternate	RITZ CRACKERS
	Milk	
Lunch or Supper CHICKEN CHOW MEIN MILK HOMEMADE WITH FRESH VEGETABLES	Meat or meat alternate	CHICKEN CUT UP
	Fruit or vegetable	BROCCOLI SWISS CHARD
	Fruit or vegetable	CARROT SLICES BEAN SPROUTS
	Bread or bread alternate	CHOW MEIN NOODLES
	Milk	MILK
P.M. Supplement (Serve 2 of these 4) PEANUT BUTTER SANDWICHES MILK	Meat or meat alternate	PEANUT BUTTER
	Fruit or vegetable	
	Bread or bread alternate	WHOLE WHEAT
	Milk	MILK

* *Reminder:* A maximum of two meals and one supplement or two supplements and one meal may be claimed per child per day.

Sanitation and Storage



Section 7—Sanitation and Storage

The following information is provided, as it is an important part of meal planning, preparation, and serving.

In preparing food, these points are important:

1. Immaculate cleanliness of dining room, kitchen, and all equipment
2. Cleanliness of workers, especially their clothes, hair, and hands
3. No person or persons with an infectious illness on duty
4. Thorough washing of fruits and raw vegetables for salads
5. Thorough cooking of cooked foods
6. No excessive handling of foods
7. No preparation of sandwiches in advance or allowing them to stand without refrigeration
8. No use of adulterated foods
9. No sitting on food preparation surfaces

When handling food, remember these points:

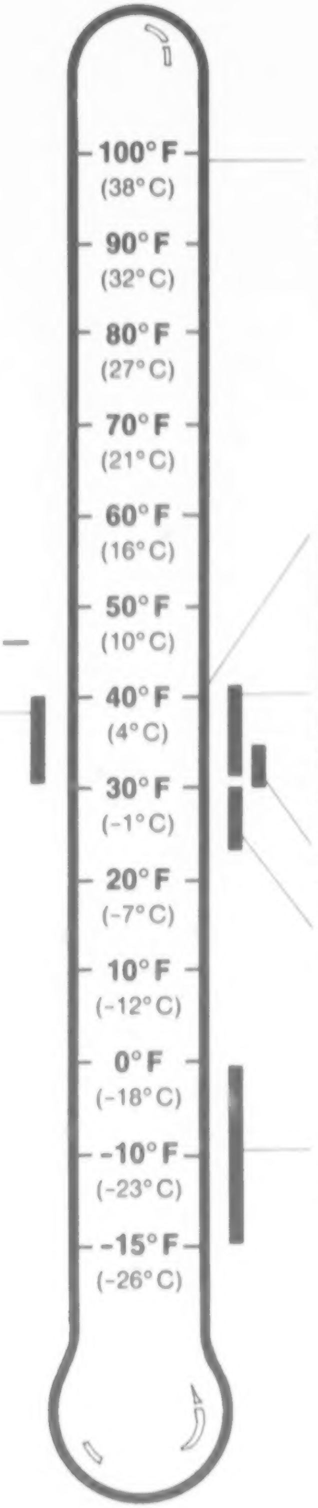
1. Wash hands before handling food.
2. Handle food as little as possible. Use tongs, forks, and spatulas in serving.
3. Protect foods on display from dust and handling.
4. Remember never to serve food left on one person's plate to another person.
5. Keep fingers out of food and drink when serving.
6. Use an ice scoop. Do not use a glass as a scoop.
7. Do not chill glasses or food items in service ice.

When storing food, do not forget these points:

1. The danger zone in food temperature is between 40° F. and 140° F. Keep refrigerator below 40° F. and steam table above 140° F.
2. Stored foods should be covered to prevent contamination.
3. Chemical poisons should be stored away from foods. Corroded utensils and cadmium plated trays should not be used.
4. Food storage rooms should be clean and well organized. Older goods should be moved forward. Stored foods should be labeled, dated, accessible, and stored at least eight inches above the floor.
5. The refrigerator should be arranged neatly, cleaned regularly, and checked daily to eliminate the spoilage of foods.
6. Food stored in the refrigerator should be placed in shallow containers. Precool hot foods.
7. The refrigerator should not be overloaded, preventing air circulation.
8. Refrigerated foods should be covered to prevent them from taking on other odors.
9. Prepared food should not be shelved below uncooked (raw) food.
10. The thermometer should be placed near door (warmest part of refrigerator).

Remember that the improper handling of used dishes and utensils can cross-contaminate clean items.

Figure 1. Recommended Storage Temperatures for Fresh Food


100° F
(38° C)
90° F
(32° C)
80° F
(27° C)
70° F
(21° C)
60° F
(16° C)
50° F
(10° C)
40° F
(4° C)
30° F
(-1° C)
20° F
(-7° C)
10° F
(-12° C)
0° F
(-18° C)
-10° F
(-23° C)
-15° F
(-26° C)

Refrigeration not only preserves the food, but also inhibits bacterial growth.

Dairy products

Note rapid decrease in shelf life at higher temperatures.

60° F (16° C) **shelf life one day —**

45° F (7° C) **shelf life four days —**

40° F (4° C) **shelf life ten to 12 days —**

31°—40° F (-1°—4° C)
Recommended storage temperature for dairy products

98° F (37° C)
Body temperature
Greatest bacterial growth

40° F (4° C)
Maximum acceptable temperature for storage of all perishable foods

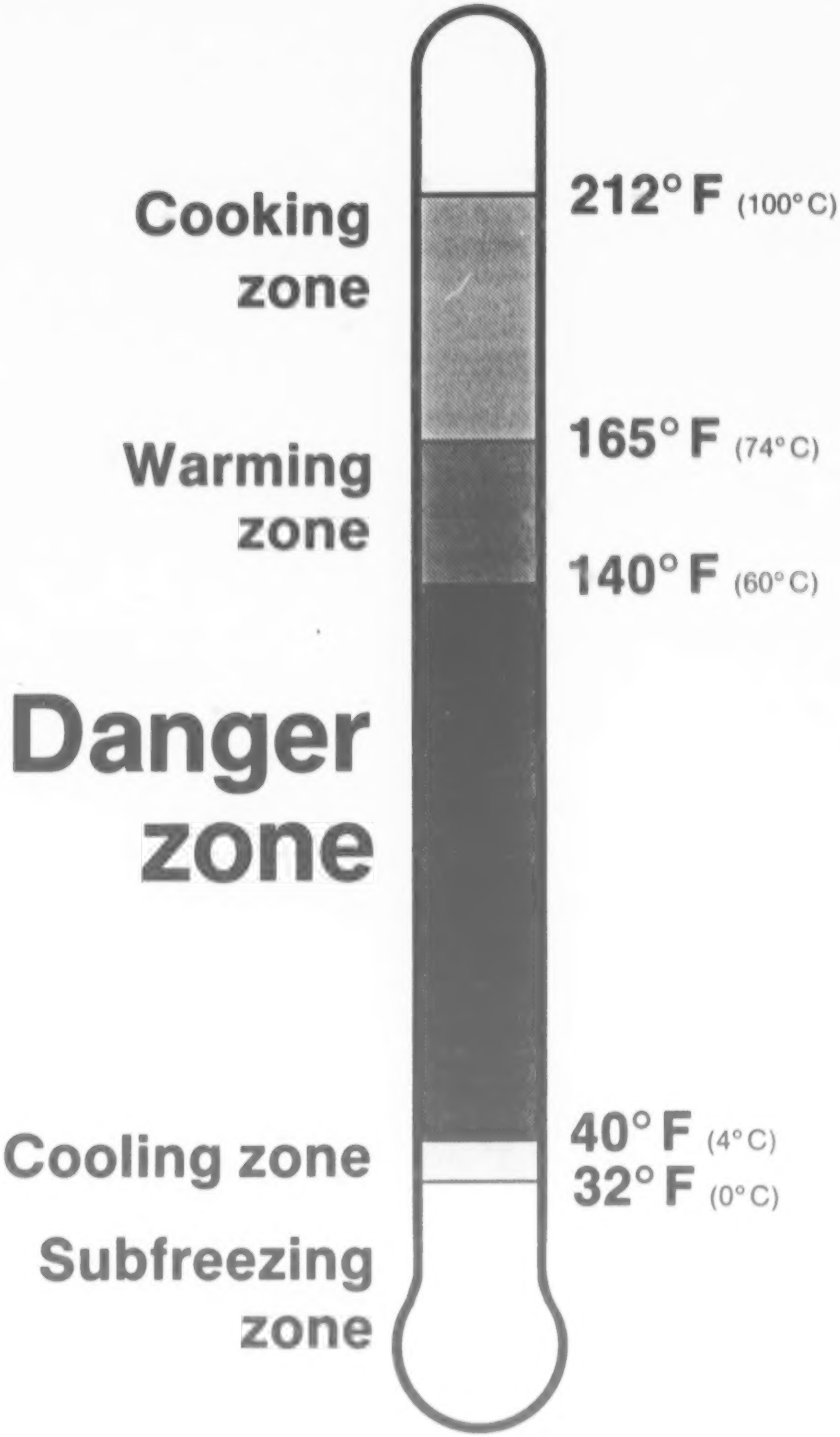
32°—40° F (0°-4° C)
Fruits (except bananas), vegetables, and most other perishable products

30°—34° F (-1°—1° C)
Meat and foul

23°—34° F (6°—-1° C)
Fish and shellfish

0°— minus 15° F (-18°—-26° C)
Frozen foods

Figure 2. Safe Temperatures for Cooking, Warming, Cooling, and Freezing Food



Cooking zone
212° F (100° C)
Warming zone
165° F (74° C)
140° F (60° C)
Danger zone
Cooling zone
40° F (4° C)
32° F (0° C)
Subfreezing zone

Section 8

Infants

Section 8—Infants

The CACFP's Infant Meal Pattern is designed to satisfy the nutritional needs of infants up to one year of age. Review the Infant Meal Patterns (Table 17) carefully to determine the components required for each of the three age groups. Note the specific age groups that require iron-fortified infant formula and iron-fortified dry cereal.

The kinds and amounts of food required by the meal pattern must be provided to the infant but may be served over a span of time consistent with the infant's eating habits. It is recommended that infant cereals, fruits, vegetables, and meats be introduced on a gradual basis to infants four months of age and older. Solid foods that are served should be of an appropriate texture and consistency for the age of the infant. The meal pattern allows a range of amounts of foods to be served for flexibility. The smaller serving size is suggested for the younger infants in any age group.

If an infant is not able to eat or drink a component(s) required by the CACFP's Infant Meal Pattern, a statement must be obtained from a recognized medical authority. See Policy Memorandum 84-212 for further explanation (Appendix D).

Definitions

Infant Cereal	*Infant cereal* means any iron-fortified dry cereal specially formulated for and generally recognized as cereal for infants that is routinely mixed with formula or milk prior to consumption. This cereal provides 7 milligrams of iron per 4-tablespoon serving.
Infant Formula	*Infant formula* means any iron-fortified infant formula intended for dietary use as a sole source of food for normal, healthy infants served in liquid form at the manufacturer's recommended dilution. This formula provides 12 milligrams of iron per quart (32 fluid ounces).
Milk	For infants **8 months up to 1 year of age**, milk means unflavored **whole** milk or an equivalent quantity of reconstituted evaporated milk that satisfies state and local standards. All milk should contain vitamins A and D at levels specified by the U.S. Food and Drug Administration.
Noncreditable Items	Imitation milks, milk alternates, cream cheese, yogurt, custard, cottage cheese, ice cream, powdered cocoa mixes, and raw milk **do not** satisfy the milk requirement.
Meat/Meat Alternates	Meat/meat alternates include meat, poultry, fish, egg yolk, cheese, cottage cheese, cheese food, cheese spread, and cooked dry beans or peas.
Bread/Cereal	Products must be whole-grain or enriched.

Questions and Answers About the Infant Meal Pattern

1. Q: **Why can low-fat or skim milk not be used instead of whole milk?**

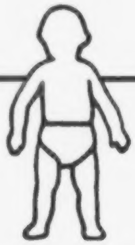
   A: Low-fat or skim milk does **not** provide enough calories for an infant's needs. Human milk, whole cow's milk, and infant formulas provide almost twice as many calories as skim milk. It becomes evident that diets based on skim milk are poorly balanced when one examines the total calories supplied from protein, fat, and carbohydrate. There may not be enough essential fatty acids in such a diet.

2. Q: **Should obese children be fed skim milk?**

   A: No. It is recommended that obese children decrease their caloric intake by 10 percent. This should be done by ending each feeding period slightly earlier than was previously the practice. If no improvement occurs in the relation of weight to length, calories should be reduced by 5 to 10 percent more. Through the next two years, emphasis should be made on establishing sound eating habits in the infant.

Table 17

Infant Meal Patterns



	Ages zero to four months	Ages four to eight months	Ages eight months to one year
Breakfast	4 to 6 fl. oz. formula[1]	4 to 8 fl. oz. formula[1] or breast milk	6 to 8 fl. oz. formula[1], breast milk, or whole milk
		0 to 3 Tbsps. infant cereal[2] (optional)	2 to 4 Tbsps. infant cereal[2]
			1 to 4 Tbsps. fruit and/or vegetable
Lunch or Supper	4 to 6 fl. oz. formula[1]	4 to 8 fl. oz. formula[1] or breast milk	6 to 8 fl. oz. formula[1], breast milk, or whole milk
		0 to 3 Tbsps. infant cereal[2] (optional)	2 to 4 Tbsps. infant cereal[2] **and/or**
		0 to 3 Tbsps. fruit and/or vegetable (optional)	1 to 4 Tbsps. lean meat, fish, poultry, egg yolk, or cooked dry beans or peas
			or 1/2 to 2 oz. cheese
			or 1 to 4 oz. cottage cheese, cheese food, or cheese spread
			1 to 4 Tbsps. fruit and/or vegetable
AM or PM Supplement	4 to 6 fl. oz. formula[1]	4 to 6 fl. oz. formula[1] or breast milk	2 to 4 fl. oz. formula[1], breast milk, whole milk, or fruit juice[3]
			0 to 1/2 slice of bread[4]
			or 0 to 2 crackers (optional)

[1] Shall be iron-fortified infant formula.

[2] Shall be iron-fortified dry, infant cereal.

[3] Shall be full-strength fruit juice.

[4] Shall be from whole-grain or enriched meal or flour.

3. Q: **If I use cow's milk for an eight-month-old infant, would I need to serve other foods to provide the nutrients that milk lacks?**

   A: Yes. A source of vitamin C can be provided in a serving of fruits or fruit juice. Seven milligrams of iron is also recommended, and this can be provided by serving cereal.

4. Q: **Why is an infant allowed to have cereal before having whole cow's milk?**

   A: Whole cow's milk should not be given to the infant before the introduction to solids has been established, because doing this could cause allergic reactions and bleeding from the gastrointestinal tract.

5. Q: **Why can I not serve an infant cereal before he or she is four months old?**

   A: Introduction of solids is not recommended before a child is four to six months of age. This introduction should be determined in relation to the developmental stage of the infant. Social pressures, aggressive marketing by the infant food industry, and the belief that solid food will help the baby sleep through the night have contributed to the introduction of solids before a child is four to six months of age. Reasons for **not** introducing foods other than breast milk or formula to a child before he or she is four months of age include:

   Possible contribution to allergic reactions (vomiting, diarrhea, and rash) may interfere with established sound eating habits and contribute to overfeeding by:

   a. The infant's physical inability to communicate satiety well enough
   b. Greater caloric intake
   c. Larger meals, more widely spaced (This is not conducive to the infant's immature metabolism.)

   Infant not developmentally capable of eating or digesting other foods (e.g., inability to move food to the back of the tongue; to chew; to sit, even with support; to have full control of neck and head muscles; or to communicate some of his or her attitudes about eating)

6. Q: **What kind of infant cereals should I start with?**

   A: It is best to begin with commercially prepared (dry box) infant cereals fortified with iron that the infant can readily absorb. Rice or barley cereals are less likely to cause a reaction. Begin with 1 teaspoon mixed with warm formula, and gradually add more during the next one to two months until the baby is eating 3 to 4 tablespoons a day. (This amount provides about 7 milligrams of iron, and supplementation is no longer necessary.) The order of introduction to other foods, once cereals have been well established, does not seem to make much difference. New foods should be introduced one at a time. Wait three to four days for any allergic reaction before trying a different food.

7. Q: **Why do infant formulas have to be iron-fortified?**

   A: Commercially prepared iron-fortified infant formulas are the best alternative to human milk. It is a complete food for infants and requires no supplements of vitamins or minerals.

   Whole cow's milk is not recommended until the infant is eight months old, because it is not a good source of iron or vitamin C.

8. Q: **What is baby-bottle mouth?**

A: This is a term used for dental caries caused by pacifying a baby with a bottle of juice or formula. Never give the baby a bottle when napping or at nighttime. (If you must, use water **only**.) Never put beverages other than milk or water in the bottle.

9. Q: **What kinds of infant foods are best?**

A: If using commercially prepared infant foods, it is strongly recommended that one use plain strained meats rather than strained dinners (mixtures of meat, vegetables, and fat). The strained dinners are significantly lower in protein and iron. Use the plain strained fruits and vegetables, not mixtures.

10. Q: **What should I be careful of when making homemade baby foods?**

A: If you are making homemade baby foods, be sure all foods, utensils, and so on are clean. Do not use prepared or canned foods with salt, sugar, or other unnecessary ingredients. Homemade baby foods should be prepared from fresh or frozen foods with no added salt, sugar, or fat. Do not refreeze foods once they have thawed. Do not store thawed foods in the refrigerator for more than one day.

11. Q: **When a range of 0 to 1 tablespoon is given, will I still get reimbursed by the Child Nutrition and Food Distribution Division for serving none of that particular food?**

A: Yes. Except when other component is breast milk or parent-provided formula.

12. Q: **Must I serve all of the different foods listed in the meal pattern chart?**

A: No. Read the chart carefully, and look for the *ands* and *ors*. For example, a child eight months old must have a serving from each of the four lunch components but does **not** have to have meat, cheese, **and** cottage cheese, or both formula **and** milk.

Three to 4 tablespoons of infant cereal **or** 3 to 4 tablespoons of fruit **or** vegetable **or** combinations of such foods may be served at lunch or supper for infants eight months to one year.

13. Q: **Do breads and cracker-type products have to be whole-grain or enriched?**

A: Yes.

14. Q: **How can I tell if a product is whole-grain or enriched?**

A: Look on the label for the listing of the ingredients. If a whole-grain or enriched flour is listed first, then it is the predominant ingredient of that product.

15. Q: **Why may egg whites not be served to infants before one year?**

A: Egg whites often are associated with allergic reactions when introduced to a child at too early an age. Therefore, extreme caution is recommended.

16. Q: **May iron-fortified cream of wheat or corn grits be counted as an infant cereal?**

A: No. According to CACFP regulations (7 CFR Part 226.2, Definitions), infant cereal means any iron-fortified dry cereal specially formulated for, and generally recognized as, **cereal for infants** that is routinely mixed with formula or milk prior to consumption. Cream of wheat and corn grits do not fit this definition.

17. Q: **Is dehydrated infant baby food allowable in the CACFP?**

A: A product that contains only dehydrated fruit or vegetable is allowable when mixed according to directions. For example, a product currently on the market contains dehydrated bananas and vitamin C. Because it contains no other ingredients, it can be considered a full-strength fruit or vegetable when rehydrated to the appropriate consistency. Similar dehydrated products that are **combinations** of meat and vegetable, for example, are not reimbursable because there is no way of determining exact amounts of each item in the product.

18. Q: **Does infant formula have to be labeled iron fortified in order to satisfy the requirement? What about so-called special formulas?**

A: Infant formula must be iron fortified to satisfy the meal pattern requirements. The label, however, is not required to state that the formula is iron fortified. If the can is not labeled iron fortified, you will have to read the fine print to discover how much iron is in the can. Iron-fortified formulas contain 12 mg of iron per 32 fluid ounces (1 quart) of formula. Special formulas (e.g., soy formulas and so on) are allowable in the program if they are iron fortified. Certain special formulas are noniron fortified and require a doctor's statement.

19. Q: **May I add honey to an infant's food or formula for added calories?**

A: No. Honey should not be fed to an infant one year of age or under because of the danger of infant botulism. Refer to Reporter 84-206 (Appendix J).

20. Q: **May dry beans be used as a meat alternate for infants?**

A: Yes.

21. Q **When a child is on mother's milk but needs solid foods to be provided by the agency, may this child be included in the reimbursable meal count?**

A: Infant zero to four months of age: On the basis of current meal pattern for this age group, the only required meal component for breakfast, snack, and lunch/supper is 4 to 6 ounces of infant formula. If the infant is receiving breast milk provided by the mother and no additional formula is provided by the child-care center or family day-care home, the meal is not creditable for reimbursement purposes. The addition of cereal or other food items is not creditable until the infant is at least four months old, at which time solid foods are added to the infant meal pattern.

Infant four to eight months of age: On the basis of current meal pattern for this age group, formula and other food items are required at breakfast and lunch/supper. If only breast milk is provided to the child, the meal is not eligible for reimbursement. If another creditable component is provided to the child in addition to the breast milk, then the meal is eligible for reimbursement. If it is necessary for a parent to supply a particular item for medical reasons (CFR 226.20 [h]), the meal may still be claimed for reimbursement if at least one other required meal component is provided.

22. Q: **Should I give Pedialyte® to an infant or child that has diarrhea?**

A: Pedialyte® is given to infants and children to replace body water and minerals frequently lost as a result of diarrhea. Do not replace formula or milk with Pedialyte® unless you have a physician's statement that specifies the number of days Pedialyte® should be taken.

23. Q: **May a provider withhold milk from an infant with a cold when the parent claims that milk causes a problem with phlegm?**

A: No. You must use the medical substitution policy and request from a recognized medical authority a statement that includes substitute fluids/ foods, or you may use iron-fortified infant (IFI) formula.

24. Q: **May the same note from a doctor stating that the child should not drink milk when he or she has a cold be used each time the child has a cold?**

A: No. A new statement must be requested each time because the needs of the child may change with age.

25. Q: **Are agencies responsible for providing any brand of formula the parent or physician requests, or may there be a reasonable number of "house" formulas served? If so, which brands would be acceptable? May noniron-fortified formulas be used?**

A: Agencies may choose to serve one or two "house" formulas that are widely accepted in the United States and are of reasonable cost. A center or day care home provider may require the parents to provide a formula, but no reimbursement is allowed if the child is under four months of age, or if the meals contain no other components for a child four months of age or older. The Child and Adult Care Food Program does not specify specific brands of formulas. Regulations do require the use of iron-fortified infant formulas because they are the major source of iron in an infant's diet. Noniron-fortified or low-iron formula is permitted only if recommended by the child's recognized medical authority and a statement is provided. (Please refer to California Department of Education policy memos 82-1[1982] and 84-212 [1984]. Copies are available by writing to the Child Nutrition and Food Distribution Division.)

26. Q: **When children reach eight to twelve months of age and are consuming table foods at home, may the center provide toddler foods (for children one to three years old) to these children in lieu of infant foods?**

A: The infant meal pattern specifies meal components but not texture. Solid foods that are served should be of an appropriate texture and consistency for the age of the infant. Use the four basic textures (pureed, mashed, ground and finely chopped, and chopped) as described in Table 21 to determine what an infant can eat comfortably. The meal pattern describes minimum amounts of foods required. You may serve more food and other foods as needed. For example, you may serve a nine-month-old infant a fruit/vegetable for breakfast in addition to the required components. **However, iron-fortified infant cereal is required up through twelve months of age.**

27. Q: **When are formulas and milk to be recorded as leftovers?**

A: Baby formula should be prepared as close to feeding time as possible. After the formula has been heated and the infant has consumed the amount needed to satisfy his or her hunger, any remaining formula or milk should be thrown away because it is an excellent medium for bacterial growth. Milk that has been poured into an open pitcher should not be poured back into the milk container.

28. Q: **When children are fed family style (that is, they feed themselves), food availability is a critical issue. How does this practice apply to infant and toddler programs? If enough food has been purchased and is readily available, must a center actually prepare this food, even though a particular child does not want or need the required amount?**

A: Family-style service would not apply to infants because they are not ready to sit at a table as a group and serve themselves. The infant meal pattern is designed to be flexible enough to satisfy the needs of the individual. Many of the components have a minimum and maximum amount that would satisfy the requirement, such as 0 to 1 tablespoons, 0 to 1/4 slice, or 4 to 6 ounces. Minimum amounts must be prepared and available. If the minimum requirement is zero (0), it is not necessary to plan and prepare that component for that infant.

29. Q: **Who is considered an infant? Is it a child under one year of age or a child under two years of age (as stated in the day-care provider's license)?**

A: Federal regulation 7 CFR 226.20(b) states the infant meal pattern shall be offered to a child up to one year of age.

30. Q: **When infants eat and drink small amounts throughout the day, how should an agency determine what meal has been served? Does quantity, food type, or time of day determine the matter?**

A: Time of day should dictate the meal pattern served and claimed within a reasonable time. As infants up to twelve months may be fed over a time span consistent with their needs, indicate a time that approximates the appropriate meal service time. For example: If a seven-month-old infant is fed 7 ounces of formula and two tablespoons of infant cereal between 7:30 a.m. and 8:30 a.m., list the meal as a breakfast. It would be acceptable to list the time as 7:30 a.m., 8 a.m., or 8:30 a.m.

31. Q: **Given the requirement that an annual time study be done regarding staff time involved in food preparation, what activities in an infant center would be counted as part of this time? And because staff often are required to heat food and feed infants their bottles throughout the day, should all of this time be included?**

A: Yes. All the time required to plan, purchase, prepare, and serve foods should be documented, including the bottle feeding of the infants.

Dilution of and Calories Provided by Infant Formula

Do not experiment. Follow directions. Formulas are designed to provide calories and nutrients in the proper amounts needed for infant growth and development. Formula provides 20 calories per ounce, the same number of calories as human breast milk. Overdiluted formulas, 2 percent milk, or skim milk do not supply enough calories for the baby to grow and develop properly.

Protein, Fat, and Carbohydrate

Standard infant formulas have the proper proportions of protein, carbohydrate, and fat to supply calories and nutrients (see Table 19).

Cow's Milk-Based Formulas

Enfamil®, Similac®, and SMA® are commonly used.

Soy-Based Formulas

Isomil®, Prosobee®, and other soy-based formulas are used for infants who are sensitive, are potentially allergic, or are allergic to cow's milk protein. Infants who cannot digest lactose (milk sugar) are given soy formula. If an infant is sensitive to sucrose as well as lactose, you will need to read the list of ingredients and select a soy formula that contains corn syrup solids or carbohydrate sources other than sucrose. Infants allergic to cow's milk protein could also be allergic to soy milk protein. If so, the infant would need to be fed a hypoallergic predigested formula. Soy milk is **not** a substitute for soy formula. The proportions of protein, fat, and carbohydrate differ.

Predigested Formulas

The protein, fat, and carbohydrate in predigested formulas are modified to make them more digestible. Two major specialized formulas, Pregestimil® and Nutramigen®, are based on nonallergenic and highly digestible protein.

Iron

Regulations require that you use iron-fortified formula until the infant is eight months of age to avoid infant anemia. Iron-fortified formula has 12 milligrams of iron per quart (32 fluid ounces). Pasteurized milk is not allowed for this age group because such milk may cause anemia from a small amount of bleeding in the intestine.

Table 18

Infant Foods

Food as purchased	*Market unit (jar size or dry weight)*	
Pureed or strained vegetables, fruits, and meats	3 3/4 oz. (weight) 7 level tablespoons	4 1/2 oz. (weight) 8 level tablespoons
Iron-fortified infant cereal	8 oz. box (dry weight) When reconstituted according to directions, provides 96 tablespoons.	
Iron-fortified infant formula	Always serve **iron-fortified** formula purchased in accordance with state licensing directions.	

1. Purchase prepared baby foods separately. It is not possible to determine how much meat, cereal, or vegetable is present in a jar of mixed food.
2. Never add salt or sugar to an infant's food.
3. Some care providers may wish to prepare their own baby foods. See question and answer number 10 for comments.

Table 19. Protein, Fat, and Carbohydrate in the Diet

Nutrient	*Function*	*Too much*	*Too little*
Protein	Builds body tissue	Dehydration	Nutritional inadequacy
Fat	Provides long-lasting energy Carries essential nutrients	Ketosis* Poor appetite	Unsatisfying: baby hungry soon
Carbohydrate	Provides quick energy Spares protein for building and repair Helps burn dietary fat	Diet not satisfying	Ketosis* Low energy Muscle mass burned for energy

Source: *Child of Mine* by Ellyn Satter. Palo Alto, Calif: Bull Publishing Co., 1983. Used with permission.

*Ketosis is the accumulation of waste products from the incomplete burning of fat.

Preparation of Formula

Formula preparation appears simple. However, if instructions are not followed carefully, formula may be mixed incorrectly or become contaminated. Purchased infant formula is sterile when poured from the container.

Equipment needed for preparing formula from **concentrate** includes the following:

1. Six nursing bottles
2. Nipple units (includes nipples, collars, disc seals, or nipple covers)
3. Sterilizer or deep kettle
4. Wire or plastic rack (that usually comes with sterilizer) or cloth (These items keep bottles off the bottom of the sterilizer or the kettle.)
5. Bottle brush
6. Punch-type can opener
7. Long-handled spoon
8. Tongs
9. Saucepan
10. One-quart measuring cup
11. Jar large enough to store nipples after sterilizing

Equipment that is needed for perparing **ready-to-use formula** includes everything listed for concentrated formula except the saucepan.

Equipment that is needed for preparing formula powder includes everything listed for concentrated formula plus an eggbeater for mixing powder.

Important points to remember follow:

1. Always check the expiration date (usually preceded by the words *use by*) on the top or bottom of can. Do not use if the expiration date has passed.
2. Pay special attention to written instructions and pictograms on each can. These sources of information will help you prepare the formula exactly as recommended.
3. Never use liquid formula that has been previously opened and left unrefrigerated. Opened cans of ready-to-use or concentrated liquid or

formula prepared from ready-to-use or concentrated liquid should be covered tightly, refrigerated, and used within 48 hours.

4. Cover opened cans of powdered formula with the plastic lid. The cans should be stored in a cool, dry place and used within one month. Formula prepared from powder should be used within 24 hours.
5. Discard any formula left in the baby's bottle after feeding; never use it later. Formula that has come in contact with the baby's mouth should not be resterilized.
6. Do not add more or less water than directed when preparing formula from concentrated liquid or powder. Improper dilution will be harmful to the baby.
7. Rinse bottles and nipples with cool water immediately after feeding to make cleaning easier. Squeeze water through nipple holes when cleaning and rinsing nipples.
8. Always wash the tops of formula cans before opening. Shake the can very well before opening.
9. Shake infant formula in bottle very well before feeding.

The first steps to follow when preparing formula are as follows:

1. Always wash your hands before preparing formula.
2. Wash all bottles, nipples, and equipment in hot, soapy water.
3. Squeeze water through nipple holes during washing and rinsing.
4. Rinse all bottles, nipples, and equipment with hot, clear water to remove soap film.
5. Wash formula can with hot, clear water and rinse well before opening formula.
6. Shake can very well before opening.
7. Read the instructions carefully.

Terminal Heating Method

The terminal heating method, not recommended for preparing formula from powder, involves the following steps:

1. Measure prescribed amount of water into measuring cup or bowl.
2. Add prescribed amount of concentrated formula to water. (The usual mixture is one part concentrated formula to one part water.) Stir.
3. Pour prepared formula into clean nursing bottles. If using disc seals, invert nipples. Otherwise, put nipples upright on bottles and cover with nipple covers. Leave nipple collars loose on bottles.
4. Set bottles on rack or on cloth on bottom of sterilizer or deep kettle. Add about 3 inches of water.
5. Cover sterilizer or kettle, bring water to a boil, and boil for 20 minutes. Remove kettle or sterilizer from heat and let it cool to touch (approximately one hour) before removing lid.
6. Remove bottles from sterilizer or kettle. Tighten collars and store in refrigerator. Use within 48 hours.

Boiling (Aseptic) Method

The boiling (aseptic) method for preparing formula includes the first steps and then the following:

1. Place clean bottles, nipples, and equipment in sterilizer or deep kettle. Add enough water to sterilizer or kettle to cover these items.
2. Cover sterilizer or kettle. Bring water to boil and boil for five minutes. Remove sterilizer from heat and let it cool to touch (approximately one hour)

before removing lid. Remove equipment with tongs and place on clean towel.

3. Boil water for formula in covered saucepan for five minutes. Remove saucepan from heat, and let it cool to room temperature.
4. Measure prescribed amount of the boiled water and concentrated formula or powder into the measuring cup or bowl. (The usual mixture is one part concentrated formula to one part water or, if using powder, one level scoop of powder to every 2 fluid ounces water.) Stir. If powder is used, mix the formula with a sterilized eggbeater.
5. Pour prepared formula into bottles. If using disc seals, invert the nipples. Otherwise, put the nipples upright on the bottles and cover them with the nipple covers.
6. Store the bottled formula in the refrigerator. Use formula prepared from the concentrated formula within 48 hours. Use formula prepared from the powder within 24 hours.

Single-Bottle Method

The single-bottle method for preparing formula includes the first steps (p.103) and then the following:

1. Sterilize the bottles, nipple units, and tongs according to the boiling (aseptic) method.
2. Store the bottles and nipple units in a convenient place at room temperature until ready to use.
3. Boil water for the formula in a saucepan for five minutes at feeding time. Then remove from heat and let cool to room temperature.
4. Pour prescribed amount of the boiled water into each bottle.
5. Add the prescribed amount of concentrated liquid or powder to water in the bottle. (The usual mixture is one part concentrated liquid to one part water; or, if powder is used, one scoop to every 2 fluid ounces of water.)
6. Shake the formula well before feeding.

The method for preparing **ready-to-use formula** includes the first steps (p.103) and then the following:

1. Sterilize bottles and nipples according to the boiling (aseptic) method.
2. Store bottles and nipples in a convenient place at room temperature until ready to use.
3. Pour prescribed amount of ready-to-use formula into bottle at feeding time.
4. Shake formula well before feeding. If any formula is left in can, cover, refrigerate, and use within 48 hours.

Proper storage of the formula is essential to preserve it. The refrigerator temperature should be 35 to 40 degrees Fahrenheit for proper food storage. Check the temperature with a kitchen thermometer.

Heating Infant Formula in a Microwave

When heating infant formula in microwave ovens:

1. Use dishwasher-safe plastic or glass bottles. Do not use bottles with plastic liners because the liners can melt.
2. Heat the bottle **without** the top at full power until the formula is warm. See Table 20.
3. Attach nipple and cap. Shake the bottle to mix the warm and cool portions of formula.
4. Let the bottle stand several minutes before testing the temperature.

5. **Always** sprinkle several drops of the formula on your inner wrist to check the temperature **before** giving the bottle to the baby.

Table 20

Heating Infant Formula in a Microwave

Amount of formula (in ounces)	*Microwave time in seconds*	
	*Room temperature (° F.)**	*Refrigerator temperature (° F.)**
4	15–20	25–45
6	20–30	30–45
8	30	45–60

*Temperature of bottle before it is warmed on stove.

Source: "Use Caution in Heating Infant Formula in Microwave Ovens." *Nutrition Perspectives*, Vol. 8, No. 10 (October, 1984), 9. Used with permission.

Heating Infant Formula on the Stove

When heating infant formula on the stove, you should:

1. Place the bottle in pan of warm water.
2. Heat on the stove until the formula is warm.
3. Test temperature by sprinkling several drops of the formula on your inner wrist before feeding the infant.

Planning Foods for Infants

Because the child's ability to accept new foods appears to be age-related, your goal is to introduce the infant to a variety of flavors and textures. Solid foods provide nutrients and calories for the growing infant and encourage developmental changes. When the infant is ready to begin eating solid foods, offer one new food at a time and continue for three to four days before you introduce another food. Start with small servings of 1 to 2 teaspoonfuls and gradually increase the serving size to 3 to 4 tablespoons per feeding.

Introduce infant cereal first, then strained fruits, strained vegetables, and finally, strained meats. You should also introduce juices (orange or apple) one at a time, preferably from a cup to avoid infant bottle-mouth syndrome.

Once babies show signs of teething, they will welcome a piece of dried bread, toast, or a teething biscuit to chew. When they have enough teeth and can chew, infants should progress to mashed or finely chopped foods to acquaint them with different textures. Sugar-sweetened toast or teething biscuits are not recommended. Honey-sweetened toast, crackers, or teething biscuits are not allowed. Bread products sweetened with fruit juice are permitted. **Do not add sugar, fat, or salt to the foods for infants.**

As babies become acquainted with their environment, including their food, they will want to explore it, handle it, and try to feed themselves. Encourage this activity as much as possible.

Texture and Consistency of Foods

The CACFP meal pattern describes foods required at appropriate developmental stages by age groups. However, the texture of the foods must be consistent with the ability of the infant to swallow, have lateral tongue movement, and chew. Use the four basic textures listed in Table 21 as a guide to determine what an infant may comfortably eat.

Table 21. Progressive Food Texture Guide

Pureed textures		Mashed textures		Ground and finely chopped textures		Chopped textures	
Required feeding skills	Sample food textures	Required feeding skills	Sample food textures	Required feeding skills	Sample food textures	Required feeding skills	Sample food textures
Swallowing with head slightly forward Some elevation tongue movement with back of tongue	Infant rice cereal Pureed squash Pureed green beans Pureed avocado Mashed potato Applesauce (no sugar) Pureed banana Pureed peaches	Swallowing with head slightly forward Elevation tongue movement with back of tongue Up and down chewing well developed Beginning lateral tongue movement	Iron-fortified cereals Mashed carrots Mashed peas Lumpy mashed bananas Well-mashed peaches (no sugar) Mashed beans Mashed egg yolk Pureed meats, poultry	Swallowing with head sightly forward Up and down chewing well developed Elevation tongue movement Lateral tongue movement complete	Iron-fortified cereals (hot or cold) Rice Crackers Soft tortilla pieces Cooked macaroni Pieces of soft cooked vegetables Banana slices Chopped fruit Soft cheeses Beans Pureed meat, poultry	Well-coordinated swallowing Elevation tongue movement Up and down chewing well developed Lateral tongue movement complete Some rotary chewing	Iron-fortified adult cereals Crackers Toast strips Biscuits Tortillas Pastas Cooked table vegetables Finely chopped coleslaw Slices of soft fruit Beans Chopped ground beef Finely chopped meats, poultry Casseroles

Jell-O can be very difficult for some people to eat because it changes textures in the mouth from solid to liquid.

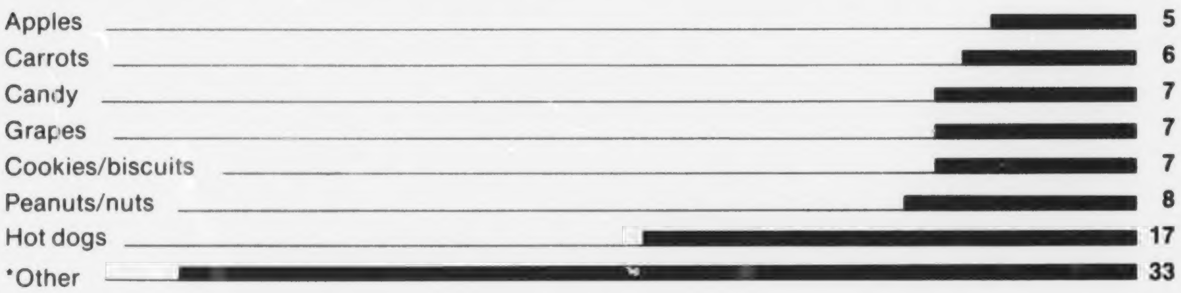
Be careful when serving slippery canned fruit as it may slip down the throat before chewing can be accomplished. Be sure to puree, mash, or chop up canned fruit.

Avoid any foods that a baby may choke on easily and are difficult to dislodge from the throat; for example: grapes; whole nuts and seeds; raw carrots, raisins, and dried fruit; hot dogs; Vienna sausages; meat sticks; pieces of meat; whole pieces of canned fruits; bones in fish; peanut butter; and popcorn.

Source: "Feeding Skill Development," by Suzanne Rice. Sacramento: California Department of Health Services, 1986. Used with permission.

Figure 3. Dangerous Food for Toddlers

Major causes of choking deaths
Number of deaths of three-year-olds and younger reported in 41 states, 1979—1981



*Other includes meat, beans, macaroni, popcorn, peanut butter, bread, chicken bones, seeds, bones, shrimp, cherries, vegetables, cheese, gum, peas, and baby food.

Source: Journal of American Medical Association

The solids served should be of an appropriate texture and consistency for the particular age group. The first solids introduced at four months will be strained. Gradual increases in texture and consistency will be made during the remainder of the infant's first year.

Heating Infant Foods in a Microwave

Baby foods that contain a substantial amount of meat should not be heated in microwave ovens. While most strained and junior baby foods may be safely heated in a microwave oven, plain meats, poultry, high meat dinners, egg yolks, and meat sticks may heat unevenly in a microwave oven and explode. The danger of an explosion is the basic concern.

Experts say that microwave heating will not make baby foods unsafe for eating, but such heating is not recommended. However, if microwave heating is used, the following safety tips should be followed:

1. Read the microwave instruction handbook.
2. Read the baby food label carefully.
3. Remove the cap from the baby food container before heating the food in the container.
4. Place the opened jar on a plate and then in the oven. Do not place the cap in the oven.
5. Start oven on the warm setting or lowest level of heating.
6. Test the food frequently until desired temperature is reached. Avoid overheating.
7. Make a written note of the heating time and temperature.

When the baby food is heated on a stove, the jars may be placed in a pan of water and heated. Stir to distribute heat evenly throughout the food. Test the temperature of the food before feeding the baby.

Menu Record Forms for Infants

CACFP regulations do not require the use of a specific form. Two suggested forms that have been developed are based on comments from sponsors and providers. (See Appendix K and Appendix L.)

Most agencies find it necessary to develop their own forms to satisfy the special nutritional needs of infants and toddlers within their program. An agency should ensure that its recordkeeping forms will satisfactorily satisfy the requirements of both the CNFDD field reviewer and auditors.

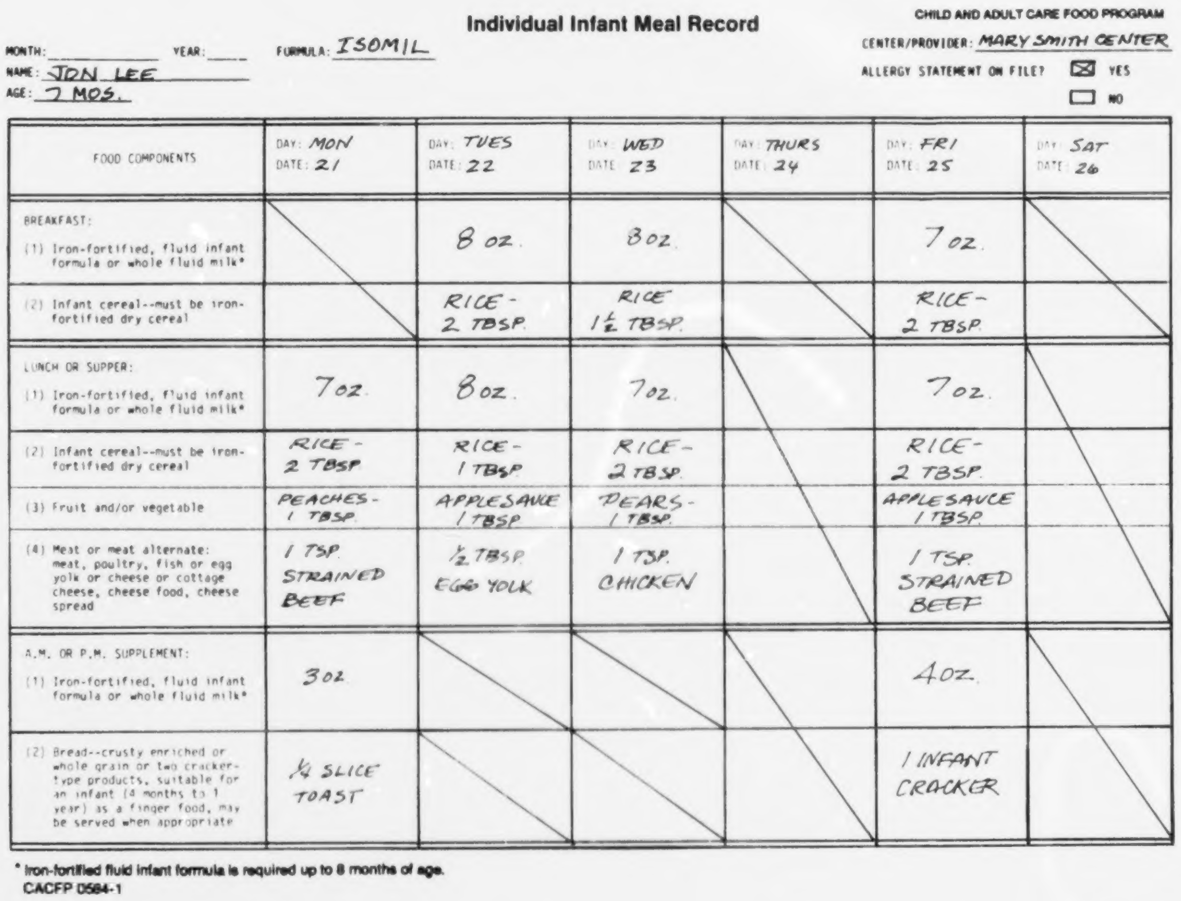
Records Required for Meal Pattern Accountability

For documentation that meals claimed for reimbursement satisfy the meal pattern requirements of the CACFP, the following information is to be routinely maintained on file and be available during your review and/or audit. The information must be retained for five years after the end of each state fiscal year.

Menu records should include the following information:

1. Date of meal service (month, day, and year)
2. Name of center/provider (If there are multiple rooms, indicate which room the infant/toddler is in.)
3. Name
4. Age (specific age or by age group)
5. Meal types (breakfast, lunch, supper, a.m. or p.m. supplement)
6. Meal times (As infants up to twelve months may be fed over a time span consistent with their needs, indicate a time that approximates the appropriate

Example 4. Individual Infant Meal Record



CHILD AND ADULT CARE FOOD PROGRAM

Individual Infant Meal Record

MONTH: ____ YEAR: ____ FORMULA: ISOMIL

NAME: JON LEE

AGE: 7 MOS.

CENTER/PROVIDER: MARY SMITH CENTER

ALLERGY STATEMENT ON FILE? ☒ YES ☐ NO

FOOD COMPONENTS	DAY: MON DATE: 21	DAY: TUES DATE: 22	DAY: WED DATE: 23	DAY: THURS DATE: 24	DAY: FRI DATE: 25	DAY: SAT DATE: 26
BREAKFAST: (1) Iron-fortified, fluid infant formula or whole fluid milk*		8 oz.	8 oz.		7 oz.	
(2) Infant cereal--must be iron-fortified dry cereal		RICE - 2 TBSP.	RICE 1½ TBSP.		RICE - 2 TBSP.	
LUNCH OR SUPPER: (1) Iron-fortified, fluid infant formula or whole fluid milk*	7 oz.	8 oz.	7 oz.		7 oz.	
(2) Infant cereal--must be iron-fortified dry cereal	RICE - 2 TBSP	RICE - 1 TBSP	RICE - 2 TBSP.		RICE - 2 TBSP.	
(3) Fruit and/or vegetable	PEACHES - 1 TBSP.	APPLESAUCE 1 TBSP	PEARS - 1 TBSP.		APPLESAUCE 1 TBSP.	
(4) Meat or meat alternate: meat, poultry, fish or egg yolk or cheese or cottage cheese, cheese food, cheese spread	1 TSP. STRAINED BEEF	½ TBSP. EGG YOLK	1 TSP. CHICKEN		1 TSP. STRAINED BEEF	
A.M. OR P.M. SUPPLEMENT: (1) Iron-fortified, fluid infant formula or whole fluid milk*	3 oz.				4 oz.	
(2) Bread--crusty enriched or whole grain or two cracker-type products, suitable for an infant (4 months to 1 year) as a finger food, may be served when appropriate	¼ SLICE TOAST				1 INFANT CRACKER	

* Iron-fortified fluid infant formula is required up to 8 months of age.

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meal service time. For example: If a seven-month-old infant is fed 7 ounces of formula and 2 tablespoons of infant cereal between 7:30 a.m. and 8:30 a.m., list the meal as a breakfast. It would be acceptable to list the time as 7:30 a.m., 8 a.m., or 8:30 a.m.)

7. The listed menu, which must show that all components of the reimbursable meal are present in the planned menu
8. The food used to satisfy the requirements (Specify the food type and form; e.g., number of ounces of iron-fortified infant formula, tablespoons of applesauce, and so on.)
9. Quantity of foods used, recorded in common units of measurement; e.g., number of tablespoons, ounces, and so on
10. Leftovers that can be safely used as a later reimbursable meal service

Review the sample forms in this section of the guide. Both forms are designed to record the components provided to individual infants. The forms were distributed to sponsors with Reporter 84-215 (August, 1984). The menu forms must be filled out daily (see Appendixes K and L).

Note: Infants may be fed over a time span consistent with their needs.

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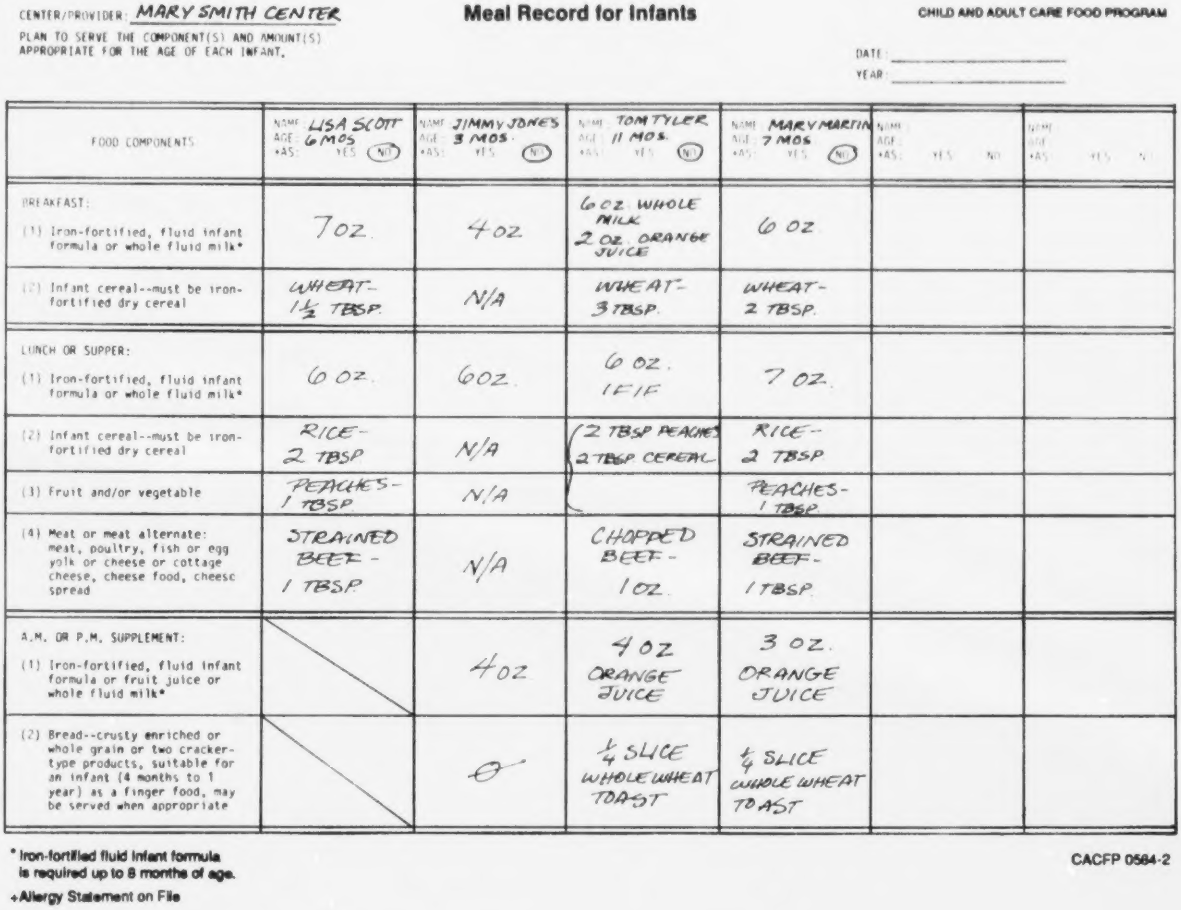
Example 5. Meal Record for Infants



CENTER/PROVIDER: MARY SMITH CENTER

Meal Record for Infants

CHILD AND ADULT CARE FOOD PROGRAM

PLAN TO SERVE THE COMPONENT(S) AND AMOUNT(S) APPROPRIATE FOR THE AGE OF EACH INFANT.

DATE: ____________

YEAR: ____________

FOOD COMPONENTS	NAME: LISA SCOTT AGE: 6 MOS +AS: YES [✓ NO]	NAME: JIMMY JONES AGE: 3 MOS. +AS: YES [✓ NO]	NAME: TOM TYLER AGE: 11 MOS. +AS: YES [✓ NO]	NAME: MARY MARTIN AGE: 7 MOS +AS: YES [✓ NO]	NAME: AGE: +AS: YES NO	NAME: AGE: +AS: YES NO
BREAKFAST: (1) Iron-fortified, fluid infant formula or whole fluid milk*	7 oz.	4 oz	6 oz. WHOLE MILK 2 oz. ORANGE JUICE	6 oz.		
(2) Infant cereal--must be iron-fortified dry cereal	WHEAT- 1½ TBSP.	N/A	WHEAT- 3 TBSP.	WHEAT- 2 TBSP.		
LUNCH OR SUPPER: (1) Iron-fortified, fluid infant formula or whole fluid milk*	6 oz.	6 oz.	6 oz. IFIF	7 oz.		
(2) Infant cereal--must be iron-fortified dry cereal	RICE- 2 TBSP	N/A	2 TBSP PEACHES 2 TBSP CEREAL	RICE-- 2 TBSP		
(3) Fruit and/or vegetable	PEACHES- 1 TBSP	N/A		PEACHES- 1 TBSP		
(4) Meat or meat alternate: meat, poultry, fish or egg yolk or cheese or cottage cheese, cheese food, cheesc spread	STRAINED BEEF - 1 TBSP	N/A	CHOPPED BEEF - 1 oz.	STRAINED BEEF- 1 TBSP.		
A.M. OR P.M. SUPPLEMENT: (1) Iron-fortified, fluid infant formula or fruit juice or whole fluid milk*		4 oz	4 oz ORANGE JUICE	3 oz. ORANGE JUICE		
(2) Bread--crusty enriched or whole grain or two cracker-type products, suitable for an infant (4 months to 1 year) as a finger food, may be served when appropriate		0	¼ SLICE WHOLE WHEAT TOAST	¼ SLICE WHOLE WHEAT TOAST		

* Iron-fortified fluid infant formula is required up to 8 months of age.

+Allergy Statement on File

CACFP 0564-2

Appendixes

Vegetable Protein Products in Child Nutrition Programs

An explanation of the new opportunities and regulations.

United States Department of Agriculture
Food and Nutrition Service
3101 Park Center Drive, Alexandria, VA 22302
(703) 756-3556

soy protein council
1800 M Street, N.W.
Washington, D.C. 20036
(202) 467-6610

Printed courtesy of the Soy Protein Council in cooperation with the Nutrition Technical Services Division, Food and Nutrition Service, U.S. Department of Agriculture

Introduction—History

Vegetable protein products (VPP) have been authorized through FNS Notice 219 since 1971 as an alternate food to meet part of the meat/meat alternate requirement of the meal patterns for the child nutrition programs. This notice established specific requirements and guidelines for the use of VPP based on the technology available at that time. The use of VPP to meet FNS Notice 219 was limited mainly to textured soy flours with 50 percent protein and allowed for a maximum moisture content for hydrated VPP of 65 percent.

Developments in food technology since that time have created new types of VPP which schools can now use in addition to products which have been used in the past. These products include isolates and concentrates. Recognition of these technological advances allows for greater flexibility in food formulation by offering school foodservice operators the option of using improved vegetable protein ingredients which result in menu flexibility and increased value for their food purchase dollars.

What is VPP? (Substitute Food)

A VPP is a food which may be used to resemble and substitute, in part, for meat, poultry or seafood. A VPP used in this manner may contain flours, concentrates or isolates, or any combination of these as ingredients along with added nutrients, colors, flavors, etc.

How do the New Regulations Compare to FNS Notice 219?

FNS Notice 219	New Regulations
Mainly limited to textured soy flours	Allows proper use of flours, concentrates or isolates
Used in combination with and substitutes for ground or diced meat, poultry, seafood	Used in combination with and substitutes for meat, poultry, seafood
Must be textured	No texture requirement
Hydration—1 Part VPP: 1.5 parts water (liquid)	Hydration—vegetable protein (fully hydrated or equivalent) to be 18% protein by weight
Dry VPP and water (liquid) actually used (to maximum allowed) credited toward meal pattern requirements	Dry, partially hydrated, fully hydrated VPP credited on equal basis
30 percent maximum level of substitution for credit	30 percent maximum level of substitution for credit
Contribution of VPP based on yield of meat, poultry, seafood it is combined with	Contribution of VPP based on yield of meat, poultry, seafood it is combined with
Established nutrient profile	Establishes more current nutrient profile
FNS reviews products and maintains list	Naming and labeling requirements recommendations established—list eliminated

Can I use FNS Notice 219 and the new regulations interchangeably?

NO. Schools using VPP which meet FNS Notice 219 must use these products in accordance with FNS Notice 219. Likewise, VPP which meet the new regulations must be used according to these regulations.

When is the final effective date?

All schools must use the new VPP regulations by February 7, 1984.

I understand that the "texture" requirement for VPP has been eliminated. Why?

The intent of this requirement was to ensure that a hydrated product resembled the physical characteristics of the meat, poultry or seafood it replaced. Recent advances in the technology of VPP make it unnecessary to impose such a requirement. Other methods are, and may be, used to produce structure where appropriate.

How is VPP used as an alternate food in the school lunch program?

- Vegetable protein products must be prepared in combination with meat, poultry or seafood.
- A fully hydrated vegetable protein product may not exceed 30 parts to 70 parts uncooked meat, poultry or seafood.
- Vegetable protein products may be used in the dry, partially hydrated or fully hydrated form in combination with meat, poultry or seafood.
- Vegetable protein products must resemble and substitute for meat, poultry or seafood. Substitute refers to a VPP whose presence in another food results in a smaller amount of meat, poultry or seafood. It does not refer to a VPP used to substitute for a starch. The VPP may resemble the meat, poultry or seafood at any point of preparation. If the VPP in the finished food looks like, tastes like, etc., the meat, poultry or seafood with which it is combined, the resemblance criterion is met.

What food products provide the best opportunities for using VPP as an alternate food?

Examples of products in which a VPP can be used as an alternate food include, but are not limited to, beef patties, chicken patties, pizza toppings, chili, meat loaf, tuna salad, and taco fillings.

When can VPP not be used as an *alternate food* for credit?

Vegetable protein products cannot be used as an *alternate food* when substituting for a starch, as in foods such as pizza crust or as a breading on a meat, poultry or seafood product. Also, VPP cannot be used as an *alternate food* when used as functional ingredients such as binders in products (i.e., binders in meat products) and thickening agents in sauces. However, this does not prevent the *use* of VPP in the products, such as pizza crust, in the child nutrition programs.

When VPP is used in the national school lunch program is it subject to nutritional labeling regulations of the Food and Drug Administration?

NO. Food products used in the National School Lunch Program are exempt from nutritional labeling by virtue of the fact that they are supplied for institutional food service only. However, manufacturers are *required* to provide the nutrition information to school foodservice personnel in literature or technical brochures on a current basis.

What about product labeling?

- The name of the substitute food must include the term *vegetable protein product* in the principal display area of the label.
- The ingredient listing of the label must also state the type(s) and source(s) of VPP contained in the substitute food, along with added nutrients, colorings, flavorings, etc.
- A VPP (substitute food or VPP mix) which meets the specifications of the new regulations must have a label stating, "This product meets USDA-FNS requirements for use in meeting a portion of the meat/meat alternate requirement of the child nutrition programs."
- Schools may use a commercially prepared meat, poultry or seafood product combined with VPP to meet all or part of the meat/meat alternate requirement if the product has a label containing the statement, "This item contains vegetable protein product(s), which is authorized as an alternate food in the child nutrition programs." This designates that the VPP used in the formulation of the meat, poultry or seafood item complies with the naming and nutritional specifications established in the regulations. The presence of this label does not insure the proper level of hydration, ratio of substitution, or the contribution that the product makes toward the meal pattern requirements. To determine the latter you may want to request additional information from the manufacturer.

Will the new regulations affect the amount of meat, poultry, and seafood used in the national school lunch program?

NO. The regulations maintain a 30 percent maximum level of substitution of hydrated vegetable protein product for meat, poultry or seafood on an uncooked basis. Therefore, the minimum percentage of meat, poultry or seafood to be used with the hydrated vegetable protein product remains at 70 percent regardless of the type of vegetable protein product used.

Why do the regulations eliminate the need for FNS to analyze specific VPP and maintain listings of acceptable products?

Due to the labeling requirements for VPP, the need to continue the monitoring of these products by FNS through an approval list is eliminated. It is expected that manufacturers will provide information on the percent protein in a VPP and/or how to use and hydrate VPP mixes.

Does FNS require that VPP be fortified with essential nutrients?

YES. The nutrient profile for vegetable protein products is more current and comprehensive than the nutrient fortification levels specified in FNS Notice 219. Vegetable protein products must contain the following levels of nutrients per gram of protein:

Nutrient	**Amount**
Vitamin A (IU)	13
Thiamine (milligrams)	.02
Riboflavin (milligrams)	.01
Niacin (milligrams)	.3
Pantothenic acid (milligrams)	.04
Vitamin B_6 (milligrams)	.02
Vitamin B_{12} (micrograms)	.1
Iron (milligrams)	.15
Magnesium (milligrams)	1.15
Zinc (milligrams)	.5
Copper (micrograms)	24
Potassium (milligrams)	17

NOTE: Certain ingredients may not be reflected in the source ingredient statement since the naturally occurring nutrients inherent in the VPP may be sufficient to meet the above requirements.

The biological quality of the protein in the VPP must be at least 80 percent that of casein, determined by performing a Protein Efficiency Ratio assay or unless FNS grants an exception by approving an alternate test.

How do you determine the hydration levels for VPP?

The regulations provide for the appropriate hydration for VPP by setting the protein quantity requirements for a product when fully hydrated at 18 percent by weight. The various VPP will require different amounts of water (or other liquid) for full hydration. It is expected that manufacturers will provide information on the percent protein in the VPP as purchased or adequate instructions so that the VPP can be properly hydrated. With this information, the following steps may be used to determine the hydration of any VPP for full credit.

1. Determine the ratio of VPP to water or other liquid (allowed for full hydration) using the following formula:

$$\frac{\text{\% protein in VPP as purchased}}{\text{18\% minimum protein}} = \text{total parts hydrated product}$$

2. Total parts hydrated product minus 1 part VPP = parts water or other liquid for full hydration.

The following examples illustrate the amounts of dry VPP and liquid to use to replace each pound of raw meat in a recipe. The percent protein in each type of VPP is representative only. The ratio of dry VPP to liquid may vary depending upon the protein content of the product you are actually purchasing.

Vegetable Protein Product-Flour (50 percent protein)

Hydrated VPP	Raw meat	Dry VPP	Liquid	Total product
substitution percent	pound	pound	pound	pound
30	0.70	0.11	0.19	1.00
25	.75	.10	.15	1.00
20	.80	.08	.12	1.00
15	.85	.06	.09	1.00
10	.90	.04	.06	1.00

Vegetable Protein Product-Concentrate (65 percent protein)

Hydrated VPP	Raw meat	Dry VPP	Liquid	Total product
substitution percent	pound	pound	pound	pound
30	0.70	0.09	0.21	1.00
25	.75	.07	.18	1.00
20	.80	.06	.14	1.00
15	.85	.05	.10	1.00
10	.90	.03	.07	1.00

Vegetable Protein Product-Isolate (85 percent protein)

Hydrated VPP	Raw meat	Dry VPP	Liquid	Total product
substitution percent	pound	pound	pound	pound
30	0.70	0.07	0.23	1.00
25	.75	.06	.19	1.00
20	.80	.05	.15	1.00
15	.85	.04	.11	1.00
10	.90	.03	.07	1.00

How do I determine the contribution that VPP makes toward the meal pattern requirements?

The contribution that VPP used in the dry or partially hydrated form makes toward the meat/meat alternate requirement is calculated based on the quantity by weight of VPP plus the amount of water or other liquid that would have been used to attain full hydration.

When computing the preparation yield of a product containing meat, poultry or seafood, and VPP, the VPP is evaluated as having the same preparation yield that is applied to the meat, poultry or seafood it replaces.

The following examples of raw beef patties made with concentrate illustrate how VPP is credited:

Formula: 30% level of replacement with concentrate. Ground Beef (no more than 30% fat).*

NOTE: The following formulations are for illustrative purposes ONLY.

	Pattie #1 (Fully Hydrated)	Pattie #2 (Partially Hydrated)
Ground Beef	**2.10 oz.**	**2.10 oz.**
Concentrate	**0.26 oz.**	**0.26 oz.**
Water (Liquid)	**0.64 oz.**	**0.34 oz.**
Portion Size	**3.00 oz.**	**2.70 oz.**

Both of these raw beef patties will provide the same contribution toward the meal patern requirements. The contribution of the beef pattie made with partially hydrated VPP should be calculated as if the VPP were fully hydrated as follows.

2.10 + .26 + .64 = 3.00 oz.

3.00 x .70* = 2.10 oz. equivalent meat/meat alternate

What are VPP mixes? How are they credited?

Vegetable protein product mixes are dry products containing VPP along with substantial levels (more than 5 percent) of seasonings, bread crumbs, flavorings, etc. For example, a mix may contain 80 percent dry VPP and 20 percent seasonings. Only the VPP portion of the mix may be credited as a meat alternate in the child nutrition programs. The regulations recommend that manufacturers provide information on the amount by weight of dry VPP in the package and instructions on how to use and hydrate the VPP mix.

How do you credit VPP mixes?

Example:

MEATLOAF MIX WITH VPP—65% VPP (53% Protein)
35% Bread Crumbs
Seasonings

Total amount of mix used is 4 lbs.

Step 1. Determine the amount of creditable VPP:

4 lbs. x .65 = 2.6 lbs. VPP

Step 2. Determine the hydration for credit:

$$\frac{\text{53 Percent Protein}}{\text{18 Percent}} = \text{2.9 parts total hydrated product}$$

2.9 parts − 1 part VPP = 1.9 parts liquid for hydration

Step 3. Determine the total amount of liquid allowed for hydration.

2.6 lbs. VPP x 1.9 = 4.94 lbs. total liquid

NOTE: 4.94 lbs. of liquid used with 4 lbs. of VPP mix will provide full hydration of the VPP.

Step 4. Determine the lbs. of hydrated VPP that can be credited toward the meal requirements.

2.60 lbs. VPP + 4.94 lbs. liquid = 7.54 lbs. hydrated VPP

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* Cooking yield as stated in the *Food Buying Guide for School Food Service*, 1980: [Ground Beef (no more than 30% fat) — 70% yield.]

Child Nutrition and Surplus Property Division

■ OFFICE OF CHILD NUTRITION SERVICES ☐ OFFICE OF SURPLUS PROPERTY

Policy Memorandum

	No. 84-213
Subject: JUICE, JUICE DRINKS, AND JUICE CONCENTRATES	**Date Issued:** MAY 1984
References: 7 CFR, PART 226.20 USDA CACFP PROGRAM MANAGEMENT MANUAL	**Expires:**

ATTENTION: CHILD AND ADULT CARE FOOD PROGRAM SPONSORS

ISSUE:

The following information provides guidance as to the use of full-strength juices, juice drinks, and juice concentrates toward meeting the CACFP Meal Pattern Requirements.

POLICY:

Fruit and vegetable juices shall be credited toward meeting the CACFP Meal Pattern Requirements as described below.

1. FULL-STRENGTH FRUIT OR VEGETABLE JUICE is an undiluted product obtained from squeezing a fruit or vegetable. It may be fresh, canned, frozen, or reconstituted from a concentrate. The juice may be served as a liquid, in frozen form, or as an ingredient in a recipe. The label must state the product is "full-strength" juice or "100 percent" juice.

   Full-strength fruit or vegetable juice may be used to meet not more than 1/2 of the fruit/vegetable requirement for lunch or supper meal services.

   The total quantity of full-strength juice used may be counted toward meeting the fruit/vegetable requirement (a ratio of 1:1).

   EXAMPLE: 1/4 cup full-strength juice = 1/4 cup fruit/vegetable

2. JUICE DRINKS are products which contain full-strength juice with added water and other ingredients such as spices or flavorings. They may be served as a liquid, in frozen form, or as an ingredient in a recipe. A juice drink may be used toward meeting the fruit/vegetable component of the meal pattern ONLY under the following conditions:

   - The juice drink must contain a minimum of 50% full-strength juice.
   - The label must state the percentage of full-strength juice contained in the product.

(CONTINUED)

California Department of Education • Bill Honig—State Superintendent of Public Instruction • Sacramento

- Only the full-strength portion of the juice drink may count toward meeting the fruit/ vegetable component (a ratio of 2:1).

  EXAMPLE: 1/2 cup of 50% juice drink = 1/4 cup of fruit/vegetable

3. JUICE CONCENTRATES may be used toward meeting the fruit/vegetable component. If 100% juice or 50% juice drink concentrate is mixed with water as per instructions, it is credited toward meeting the meal pattern requirements in the same way as a full-strength juice or juice drink.

   If a 100% juice or 50% juice drink concentrate is used in its concentrated form (not mixed with water) it may be credited on a reconstituted basis, i.e., as if it were mixed with water.

   EXAMPLE: Instructions state that 1 can of orange juice concentrate is to be mixed with 3 cans of water to make 100% full-strength orange juice. If 1 tablespoon of the concentrate is used in a recipe, it may be counted as 1/4 cup juice because 1 part concentrate would normally be mixed with 3 parts water.

   1 Tablespoon Concentrate + 3 Tablespoons Water = 4 Tablespoons which is the same as 1/4 cup.

   REMINDER: Juice may not be served as the fruit/vegetable component of a supplement (snack) when milk is served as the only other component. Nectars and juice drinks such as lemonade do not contain sufficient quantities of full-strength juice to meet CACFP Meal Pattern Requirements.

   RECOMMENDATION: Full-strength juices are recommended to keep the amount of liquids served during a meal at a reasonable level for children.

BACKGROUND:

Federal regulations state that full-strength fruit or vegetable juice may be used to meet the meal pattern requirement. Guidance material received from USDA, Food and Nutrition Services clarifies the crediting of full-strength juice, juice drinks, and juice concentrates toward meeting the Child and Adult Care Food Program Meal Pattern Requirements.

Please file this Policy Memorandum in your CHILD AND ADULT CARE FOOD PROGRAM SPONSOR HANDBOOK, note the number, date and changes in Section 5420 for future reference.

CONTACT:

If you have any questions, please contact the Child and Adult Care Food Program at (916) 445-0850 or toll free at (800) 952-5609.

Gene White

Gene White, Director
Child Nutrition & Food Distribution Division

Maria Balakshin

Maria Balakshin, Administrator
Office of Child Nutrition Services

Appendix C

Spot the Season for Fresh Fruit and Vegetable Bargains!

FRUIT	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Apples												
Delicious	■	■	■	■	■	■			■	■	■	■
Jonathon	■								■	■	■	■
McIntosh	■	■	■						■	■	■	■
Winesap	■	■	■	■	■	■	■	■				■
Apricots						■	■					
Bananas	■	■	■	■	■	■	■	■	■	■	■	■
Blueberries					■	■	■	■	■			
Cantaloupe						■	■	■				
Cherries						■	■	■				
Grapefruit	■	■	■	■	■	■						■
Grapes, Tokay												
Thompson Seedless	■	■	■	■					■	■	■	■
Melons							■	■	■	■		
Oranges												
Navel	■	■	■	■	■	■				■	■	■
Valencia	■	■	■	■	■	■	■	■				
Peaches							■	■	■			
Pears												
Bartlett							■	■	■	■		
d'Anjou	■	■	■	■						■	■	■
Pineapple		■	■	■	■	■						
Plums and Prunes					■	■	■	■	■	■		
Strawberries				■	■	■	■					

VEGETABLES	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Asparagus		■	■	■								
Beans							■	■	■	■		
Broccoli	■	■	■	■						■	■	■
Brussels sprouts	■	■	■					■	■	■	■	■
Cabbage	■	■	■	■	■							■
Carrots	■				■	■	■					
Cauliflower	■	■	■	■								
Celery	■	■	■	■	■	■	■		■	■	■	■
Corn					■	■	■	■				
Cucumbers				■	■	■		■	■	■		
Kohlrabi						■	■					
Lettuce	■	■	■	■	■	■	■	■	■	■	■	■
Onions, dry					■	■						
Onions, green	■	■	■	■	■				■	■	■	
Peas					■	■	■	■				
Peppers							■	■	■	■	■	
Potatoes	■	■	■	■	■	■	■	■	■	■	■	■
Potatoes, sweet	■	■	■						■	■	■	■
Summer squash							■	■	■	■		
Tomatoes							■	■	■	■		

Appendix D

Child Nutrition and Surplus Property Division

■ OFFICE OF CHILD NUTRITION SERVICES ☐ OFFICE OF SURPLUS PROPERTY

# Policy Memorandum	No. 84-212
Subject: DEFINITION OF RECOGNIZED MEDICAL AUTHORITY	**Date Issued:** MAY 1984
References: 7 CFR, Part 226.20 (h), August 20, 1982; CACFP Sponsor Handbook, §5520, Policy Memorandum #82-1	**Expires:**

ATTENTION: CHILD AND ADULT CARE FOOD PROGRAM SPONSORS

ISSUE:

Federal regulations state that meal substitutions shall be made only when supported by a statement from a RECOGNIZED MEDICAL AUTHORITY which includes recommended alternate foods.

POLICY:

A RECOGNIZED MEDICAL AUTHORITY shall be defined as a licensed physician, nurse, or physician's assistant.

BACKGROUND:

Due to medical or other special dietary needs, some children participating in the Child and Adult Care Food Program are unable to eat or drink components required by the meal pattern. Federal regulation requires the child care provider to obtain a written medical order from a RECOGNIZED MEDICAL AUTHORITY which specifies food or foods to be omitted from the child's diet and the food or choice of foods that may be substituted. The medical order must be kept on file at the child care facility.

Please file this Policy Memorandum in your CHILD AND ADULT CARE FOOD PROGRAM SPONSOR HANDBOOK. Note the number, date and subject in Section 5520 for future reference.

CONTACT:

If you have any questions, please contact the Child and Adult Care Food Program at (916) 445-0850 or toll free at (800) 952-5609.

Gene White

Gene White, Assistant Superintendent
Child Nutrition & Food Distribution Division

California Department of Education • Bill Honig—State Superintendent of Public Instruction • Sacramento

CHILD AND ADULT CARE FOOD PROGRAM—10/84
OFFICE OF CHILD NUTRITION SERVICES

CHECKLIST FOR MENU DESIGN PRINCIPLES

After you have planned the menus, use the checklist below to be sure you have met your goal of delicious, nutritious meals.

DO YOUR MEALS INCLUDE A GOOD BALANCE OF:

- Color for the food and garnishes?
- Texture?
- Shape?
- Flavor?
- Temperature?

HAVE YOU INCLUDED WHOLE GRAIN BREAD/CEREAL PRODUCTS?

HAVE YOU INCLUDED FRESH FRUITS AND VEGETABLES?

ARE MOST OF THE FOODS AND FOOD COMBINATIONS ONES YOUR CHILDREN HAVE LEARNED TO EAT?

HAVE YOU CONSIDERED CHILDREN'S CULTURAL, ETHNIC, AND RELIGIOUS FOOD PRACTICES?

HAVE YOU INCLUDED A POPULAR FOOD IN A LUNCH WHICH INCLUDES A "NEW" OR LESS POPULAR FOOD?

DO YOU HAVE A PLAN TO INTRODUCE NEW FOODS?

HAVE YOU INCLUDED DIFFERENT KINDS OR FORMS OF FOODS (FRESH, CANNED, FROZEN, DRIED)?

HAVE YOU INCLUDED LESS FAMILIAR FOODS OR NEW METHODS OF PREPARATION OCCASIONALLY?

HAVE YOU PLANNED FESTIVE FOODS FOR HOLIDAYS, BIRTHDAYS, OR SPECIAL ACTIVITIES?

Appendix F

MENU PRODUCTION RECORD – CHILD AND ADULT CARE CENTERS NAME: ______________________ DATE: _________
CHILD AND ADULT CARE FOOD PROGRAM
FORM 6277

Number Served	Menu	Required Components	Name of Food Used	Total Amount Prepared	Total Amount Left over
1-3 yrs ____ 3-6 yrs ____ 6+ yrs ____ Adults: ____ Total: ____	Breakfast:	Juice, fruit or vegetable			
		Bread, bread equivalent or cereal			
		Milk			
1-3 yrs ____ 3-6 yrs ____ 6+ yrs ____ Adults: ____ Total: ____	AM Supplement: (Serve 2 of these 4)	Meat or meat alternate			
		Fruit or vegetable			
		Bread or equivalent			
		Milk			
1-3 yrs ____ 3-6 yrs ____ 6+ yrs ____ Adults: ____ Total: ____	Lunch or Supper:	Meat or meat alternate			
		Fruit or vegetable			
		Fruit or vegetable			
		Bread or equivalent			
		Milk			
1-3 yrs ____ 3-6 yrs ____ 6+ yrs ____ Adults: ____ Total: ____	PM Supplement:	Meat or meat alternate			
		Fruit or vegetable			
		Bread or equivalent			
		Milk			

CHILD AND ADULT CARE FOOD PROGRAM — 10/84
OFFICE OF CHILD NUTRITION SERVICES

CHECKLIST FOR REQUIREMENTS AND RECOMMENDATIONS

After you have planned the menu items and serving sizes for the various age groups of children and for program adults, use the checklist below to be sure your have met program requirements.

REQUIREMENTS: HAVE YOU INCLUDED ALL MEAL COMPONENTS?

HAVE YOU PLANNED SERVING SIZES SUFFICIENT TO PROVIDE ALL CHILDREN AND PROGRAM ADULTS WITH THE REQUIRED QUANTITIES OF:

Meat or meat alternate?
Two or more vegetables and/or fruits?
Whole grain or enriched bread or bread alternate?
Fresh, fluid milk?

RECOMMENDATIONS:

HAVE YOU INCLUDED A VITAMIN A, VEGETABLE OR FRUIT AT LEAST 4 TIMES A WEEK?

HAVE YOU INCLUDED A VITAMIN C VEGETABLE OR FRUIT EACH DAY?

HAVE YOU INCLUDED SOURCES OR IRON EACH DAY?

HAVE YOU KEPT CONCENTRATED SWEETS AND SUGARS TO A MINIMUM?

HAVE YOU KEPT FOODS HIGH IN FAT AND SALT TO A MINIMUM?

Appendix H (Side 1)

Date: ____________

Total Served[1]
1–3 yrs ____________
3–6 yrs ____________
6–12 yrs ____________
Adults ____________

Breakfast and Meal Supplements

Breakfast component requirements[1]	Menu[1] AGE FACTOR	Number of units	Market unit	Servings per market unit	Food amount needed	Food amount used[1]	Leftovers to be reused
1. Fruit/ Vegetable or Full-Strength Juice	1-3 ________ × 1 = ________ + 3-6 ________ × 2 = ________ + 6-12[2] ________ × 2 = ________ + =	1/4 c.					
1. Bread/Bread Alternate or cooked pasta or grains. Dry cereal: Multiply by 1, 1.2, 3	1-3 ________ × 1 = ________ + 3-6 ________ × 1.5 = ________ + 6-12[2] ________ × 2 = ________ + =	1/2 sl.					
1. Fluid Milk	1-3 ________ × 1 = ________ + 3-6 ________ × 1.5 = ________ + 6-12[2] ________ × 2 = ________ + =	1/2 c.					
4. Other							

Menu[1]		Age		Milk and bread	Meat	Fruit/vegetable
AM supplement	**1–6** ________	1–6	____	× 1 = ______	× .5 = ________	× 2 = ________
	6–12 ________	6–12[2]	____	× 2 = ______	× 1 = ________	× 3 = ________
Total served[1]:		Total	____	______	________	________
PM supplement	**1–6** ________	1–6	____	× 1 = ______	× .5 = ________	× 2 = ________
	6–12 ________	6–12[2]	____	× 2 = ______	× 1 = ________	× 3 = ________
Total served[1]:		Total	____	______	________	________
			Units	(½ c) (½ sl)	(1 oz.)	(¼ c)

Choose any two of the four components[1] for each supplement.			Number of units	Market unit	Servings per market unit	Food amount needed	Food amount used[1]	Leftover to be reused
1. Milk	a.m.							
	p.m.							
2. Bread/ bread alternate	a.m.							
	p.m.							
3. Meat/ meat alternate	a.m.							
	p.m.							
4. Full-strength juice, fruit, or vegetable	a.m.							
	p.m.							

Note: Milk and juice may not be served together at one supplement.

[1] Required information to qualify for USDA reimbursement

[2] Include program and participating adults in ages 6–12 count.

Appendix H (Side 2)

Lunch and Supper **Date:** ____________

Menu[1]		Number of servings planned	Total served[1]
Main Dish	____________	Children:	
Vegetable/Fruit	____________	Ages 1-3 ____	____
	____________	Ages 3-6 ____	____
Bread/Bread Alternate	____________	Ages 6-12 ____	____
	____________	Adults + ____	____
Milk	____________	6-12[2] = ____	
Other	____________		____

Four component requirements[1]	Food items: Age	Food items: Factor	Number of units	Market unit	Servings per market unit	Food amount needed	Food amount used[1]	Leftovers to be reused
1. Meat or meat alternate	1-3 ____ × 3-6 ____ × 6-12[2] ____ ×	1 = ____ + 1.5 = ____ + 2 = ____ + =	1 oz.					
Used in main dish or main dish and one other menu item								
2. Vegetables and/or fruits	1-3 ____ × 3-6 ____ × 6-12[2] ____ ×	1 = ____ + 2 = ____ + 3 = ____ + =	1/4 c					
Two or more								
3. Bread or bread alternate or cooked pasta or grains	1-3 ____ × 3-6 ____ × 6-12[2] ____ ×	1 = ____ + 1 = ____ + 2 = ____ + =	1/2 sl.					
4. Fluid milk	Use "Number of Units" from meat/ meat alternate		1/2 c.					
5. Other								

[1] Required information to qualify for USDA reimbursement

[2] Include program and participating adults in ages 6–12 count.

CACFP (10/80)

Appendix I

CALIFORNIA DEPARTMENT OF EDUCATION
CHILD NUTRITION & FOOD DISTRIBUTION DIVISION
CNFDD 6278 (Rev. 10/90)

ATTENDANCE, MEAL COUNT, AND MENU RECORD SHEET

(Day Care Home Providers)

PROVIDER'S NAME	DATE (MONTH, DAY, YEAR)

AGE GROUPS

1-3 = A
3-6 = B
6+ = C

TOTAL NUMBER SERVED

Breakfast ____
A.M. Supplement ____
Lunch ____
P.M. Supplement ____
Supper ____

Time In	Child's Name	Age Group	Time Out

MENU	REQUIRED COMPONENTS	NAME OF FOOD USED
Breakfast:	Juice, Fruit, or Vegetable	
	Bread or Bread Alternate	
	Milk	
A.M. Supplement *(Serve 2 of these 4.)**	Meat or Meat Alternate	
	Fruit or Vegetable	
	Bread or Bread Alternate	
	Milk	
Lunch or Supper:	Meat or Meat Alternate	
	Fruit or Vegetable	
	Fruit or Vegetable	
	Bread or Bread Alternate	
	Milk	
P.M. Supplement *(Serve 2 of these 4.)**	Meat or Meat Alternate	
	Fruit or Vegetable	
	Bread or Bread Alternate	
	Milk	

***Juice may not be served when milk is served as the only other component.**

Appendix J

California Department of Education

Child Nutrition & Surplus Property Reporter

■ Office of Child Nutrition Services
☐ Office of Surplus Property

Date: APRIL 1984 No. 84-206

ATTENTION: CHILD AND ADULT CARE FOOD PROGRAM SPONSORS

NOTE: PLEASE DISTRIBUTE COPIES OF THIS REPORTER TO ALL CENTERS AND/OR HOMES UNDER YOUR SPONSORSHIP.

SUBJECT: INFANT BOTULISM AND HONEY

State health officials have again issued warnings not to feed honey to infants under twelve (12) months of age.

Studies have found:

1. Ten percent (10%) of all honey samples tested to date in California contain Clostridium botulinum spores. Clostridium botulinum spores multiply in the infant intestine and produce a neurotoxin (botulin) causing a disease called Flacid Paralysis.
2. Infants who became ill with Flacid Paralysis and were hospitalized had been fed honey. The honey fed to these infants was tested and found to contain Clostridium botulinum spores.
3. Honey is a risk factor which can be eliminated from the infant's diet. It is recommended that all honey (raw, processed or cooked) be eliminated as the spores are heat resistant and are not destroyed by regular cooking methods.
4. The disease appears to be age-related. It is recommended that honey not be fed to infants under twelve (12) months of age.

These recommendations have been made by:

The Center for Disease Control; Atlanta, Georgia
Sioux Honey Association; Sioux City, Iowa
California Department of Health Services, Infectious Disease Section;
Berkeley, California
United States Department of Agriculture, Western Regional Office, Food and
Nutrition Services; San Francisco, California

If you have any questions, please contact the Child and Adult Care Food Program at (916) 445-0850 or toll free at (800) 952-5609.

Bill Honig—State Superintendent of Public Instruction • Sacramento

Appendix K

CENTER/PROVIDER: ____________________

Meal Record for Infants

CHILD AND ADULT CARE FOOD PROGRAM

PLAN TO SERVE THE COMPONENT(S) AND AMOUNT(S) APPROPRIATE FOR THE AGE OF EACH INFANT.

DATE: ____________________

YEAR: ____________________

FOOD COMPONENTS	NAME: AGE: +AS: YES NO	NAME: AGE: +AS: YES NO	NAME: AGE: +AS: YES NO	NAME: AGE: +AS: YES NO	NAME: AGE: +AS: YES NO	NAME: AGE: +AS: YES NO
BREAKFAST: (1) Iron-fortified, fluid infant formula or whole fluid milk*						
(2) Infant cereal--must be iron-fortified dry cereal						
LUNCH OR SUPPER: (1) Iron-fortified, fluid infant formula or whole fluid milk*						
(2) Infant cereal--must be iron-fortified dry cereal						
(3) Fruit and/or vegetable						
(4) Meat or meat alternate: meat, poultry, fish or egg yolk or cheese or cottage cheese, cheese food, cheese spread						
A M OR P M SUPPLEMENT: (1) Iron-fortified, fluid infant formula or fruit juice or whole fluid milk*						
(2) Bread--crusty enriched or whole grain or two cracker-type products, suitable for an infant (4 months to 1 year) as a finger food, may be served when appropriate						

* Iron-fortified fluid infant formula is required up to 8 months of age.

+ Allergy Statement on File

CACFP 0584-2

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Appendix L

Individual Infant Meal Record

CHILD AND ADULT CARE FOOD PROGRAM

MONTH: ____________ YEAR: _____ FORMULA: ____________

NAME: ____________________

AGE: __________

CENTER/PROVIDER: ____________________

ALLERGY STATEMENT ON FILE? ☐ YES ☐ NO

FOOD COMPONENTS	DAY: DATE:	DAY: DATE:	DAY: DATE:	DAY: DATE:	DAY: DATE:	DAY: DATE:
BREAKFAST: (1) Iron-fortified, fluid infant formula or whole fluid milk*						
(2) Infant cereal--must be iron-fortified dry cereal						
LUNCH OR SUPPER: (1) Iron-fortified, fluid infant formula or whole fluid milk*						
(2) Infant cereal--must be iron-fortified dry cereal						
(3) Fruit and/or vegetable						
(4) Meat or meat alternate: meat, poultry, fish or egg yolk or cheese or cottage cheese, cheese food, cheese spread						
A.M. OR P.M. SUPPLEMENT: (1) Iron-fortified, fluid infant formula or fruit juice or whole fluid milk*						
(2) Bread--crusty enriched or whole grain or two cracker-type products, suitable for an infant (4 months to 1 year) as a finger food, may be served when appropriate						

* Iron-fortified fluid infant formula is required up to 8 months of age.

CACFP 0584-1

Appendix M

Menu Production Work Sheet

Date and site	*Breakfast* *Lunch* *Supplement*		*Meal count*		
Date: Site:			Participants	Program adults	Total
		Groups			
		Estimates			

A*	B*	1*	2*	3	4	5*	6	7	8	9	10*	11*	12*
			Obtain from *USDA Food Buying Guide*										
Number servings needed	Number servings on hand	Food item and form used	Purchase unit	Servings per purchase unit	Serving size per purchase unit	Planned serving size**	(5 ÷ 4) Multiplier	(A - B) Servings to prepare	(6 X 7) Total units	(8 ÷ 3) Amount to prepare	Amount prepared	Actual meal count	Leftover servings
Breakfast:												0–1 ______ 0–3 ______ 3–5 ______ 5–12 ______ Adult ______ **Total** ______	
Lunch:												0–1 ______ 0–3 ______ 3–5 ______ 5–12 ______ Adult ______ **Total** ______	
Supplement:												0–1 ______ 0–3 ______ 3–5 ______ 5–12 ______ Adult ______ **Total** ______	

* USDA Required Information

** Planned Serving Size refers to the contribution to meal requirements for each age group to be served.

Directions: Complete columns A, B, 1, 2, 3, and 4
Proceed as follows for columns 5–9:
Column 6 = Column 5 ÷ 4
Column 7 = Column A - Column B
Column 8 = Column 6 X Column 7
Column 9 = Column 8 ÷ Column 3
Complete columns 10, 11, and 12 after meal is served.

Appendix N

Child Nutrition and Food Distribution Division

Child and Adult Care Food Program
September 1989

Menu Record Sheet for Child and Adult Care Centers

For: ______________________ Date: ____________

Number served	*Menu*	*Required components*	*Name of food used*	*Total amount prepared*	*Total amount left over*
1–5 yrs. ______	A.M. snack	Meat or meat alternate			
6–12 yrs. ______	or	Fruit or vegetable			
Program adults ______	P.M. snack	Fruit or vegetable			
TOTAL ______		Bread or equivalent			
		Milk			
1–5 yrs. ______	A.M. snack	Meat or meat alternate			
6–12 yrs. ______	or	Fruit or vegetable			
Program adults ______	P.M. snack	Fruit or vegetable			
TOTAL ______		Bread or equivalent			
		Milk			
1–5 yrs. ______	A.M. snack	Meat or meat alternate			
6–12 yrs. ______	or	Fruit or vegetable			
Program adults ______	P.M. snack	Fruit or vegetable			
TOTAL ______		Bread or equivalent			
		Milk			
1–5 yrs. ______	A.M. snack	Meat or meat alternate			
6–12 yrs. ______	or	Fruit or vegetable			
Program adults ______	P.M. snack	Fruit or vegetable			
TOTAL ______		Bread or equivalent			
		Milk			
1–5 yrs. ______	A.M. snack	Meat or meat alternate			
6–12 yrs. ______	or	Fruit or vegetable			
Program adults ______	P.M. snack	Fruit or vegetable			
TOTAL ______		Bread or equivalent			
		Milk			

Appendix O

CALIFORNIA DEPARTMENT OF EDUCATION
CHILD NUTRITION & FOOD DISTRIBUTION DIVISION

CNFDD 6277 (Rev. 10/90)

MENU PRODUCTION RECORD - CHILD CARE CENTERS

NAME	**DATE (MONTH, DAY, YEAR)**

Number Served	Menu	Required Components	Name of Food Used	Total Amount Prepared	Total Amount Leftover
1-3 yrs.: ________ 3-6 yrs.: ________ 6+ yrs.: ________ Program adults: ________ Total: ________	**Breakfast:**	**Juice, Fruit or Vegetable**			
		Bread, Bread Equivalent or Cereal			
		Milk			
1-3 yrs.: ________ 3-6 yrs.: ________ 6+ yrs.: ________ Program adults: ________ Total: ________	**AM Supplement: (Serve 2 of these 4)**	**Meat or Meat Alternate**			
		Fruit or Vegetable			
		Bread or Bread Equivalent			
		Milk			
1-3 yrs.: ________ 3-6 yrs.: ________ 6+ yrs.: ________ Program adults: ________ Total: ________	**Lunch or Supper:**	**Meat or Meat Alternate**			
		Fruit or Vegetable			
		Bread or Bread Equivalent			
		Milk			
1-3 yrs.: ________ 3-6 yrs.: ________ 6+ yrs.: ________ Program adults: ________ Total: ________	**P.M. Supplement: (Serve 2 of these 4)**	**Meat or Meat Alternate**			
		Fruit or Vegetable			
		Bread or Bread Equivalent			
		Milk			

Appendix P

SITE: ______________________

DATE: ______________________

CHILD CARE FOOD PROGRAM

MENU PRODUCTION WORK SHEET

MENU	PLANNED SERVING SIZES	GROUPS	ESTIMATE	ACTUAL COUNT
		1 up to 3 years		
		3 up to 6 years		
		6+ years		
		Program Adults		
		Visitors		
		TOTAL		

A*	B*	1*	2*	3	4	5*	6	7	8	9	10*	11*		12****
			OBTAIN FROM GUIDE**				(5 ÷ 4)	(A - B)	(6 x 7)	(8 ÷ 3)				
Number Servings Needed	Number Servings on Hand	Food Item and Form Used	Purchase Unit	Servings per Purchase Unit	Serving Size per Purchase Unit	Planned Serving Size***	Multiplier	Servings to Prepare	Total Units Required	Amount to Prepare	Amount Prepared	Estimated Meal Count	Actual Meal Count	Leftover Servings

* USDA Required Information

** Refer to Simplified Buying Guide

*** Planned Serving Size refers to the contribution to meal requirements for each age group to be served

**** Complete only if food is to be used in another reimbursable meal service

Directions:

Complete Columns A, B, 1, 2, 3, & 4
Proceed as follows for Columns 5-9
Column 6 = Column 5 - Column 4
Column 7 = Column 1 - Column B
Column 8 = Column 6 x Column 7
Column 9 - Column 8 - Column 3
Complete Columns 10, 11, & 12 after meal is served

Appendix Q

MENU PRODUCTION WORK SHEET

DATE:*	BREAKFAST MENU*	LUNCH MENU*	SUPPLEMENT MENU*
SITE:*			

A*	B*	1*	2*	3	4	5*	6	7	8	9	10*	11*		12****
			OBTAIN FROM GUIDE**				(5 ÷ 4)	(A - B)	(6 x 7)	(8 ÷ 3)				
Number Servings Needed	Number Servings on Hand	Food Item and Form Used	Purchase Unit	Servings per Purchase Unit	Serving Size per Purchase Unit	Planned Serving Size***	Multiplier	Servings to Prepare	Total Units Required	Amount to Prepare	Amount Prepared	Estimated Meal Count	Actual Meal Count	Leftover Servings
Breakfast												Ages 1–3 3–6 6+ Preg. adult Total		
Lunch												1–3 3–6 6+ Preg. adult Total		
Supple-ment												1–3 3–6 6+ Preg. adult Total		

* USDA Required Information

** Refer to Simplified Buying Guide

*** Planned Serving Size refers to the contribution to meal requirements for each age group to be served

**** Complete only if food is to be used in another reimbursable meal service

Directions:

Complete Columns A, B, 1, 2, 3, & 4
Proceed as follows for Columns 5-9
Column 6 = Column 5 - Column 4
Column 7 = Column 1 - Column B
Column 8 = Column 6 x Column 7
Column 9 - Column 8 - Column 3
Complete Columns 10, 11, & 12 after meal is served

MENU PRODUCTION WORK SHEET

DATE:*	BREAKFAST MENU*	LUNCH MENU*	SUPPLEMENT MENU*
SITE:*			A.M.
			P.M.

A*	B*	1*	2*	3	4	5*	6	7	8	9	10*	11*		12****
			OBTAIN FROM GUIDE**				(5 ÷ 4)	(A - B)	(6 x 7)	(8 ÷ 3)				
Number Servings Needed	Number Servings on Hand	Food Item and Form Used	Purchase Unit	Servings per Purchase Unit	Serving Size per Purchase Unit	Planned Serving Size***	Multiplier	Servings to Prepare	Total Units Required	Amount to Prepare	Amount Prepared	Estimated Meal Count	Actual Meal Count	Leftover Servings
Breakfast												Ages 1-3 3-6 6+ Prog. adult Total		
Lunch												1-3 3-6 6+ Prog. adult Total		
A.M. Supplement												1-3 3-6 6+ Prog. adult Total		
P.M. Supplement												1-3 3-6 6+ Prog. adult Total		

* USDA Required Information

** Refer to Simplified Buying Guide

*** Planned Serving Size refers to the contribution to meal requirements for each age group to be served

**** Complete only if food is to be used in another reimbursable meal service

Directions:

Complete Columns A, B, 1, 2, 3, & 4
Proceed as follows for Columns 5-9
Column 6 = Column 5 ÷ Column 4
Column 7 = Column 1 - Column B
Column 8 = Column 6 x Column 7
Column 9 - Column 8 ÷ Column 3
Complete Columns 10, 11, & 12 after meal is served

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Appendix S

Weekly Menu Production Record - Breakfast

Adult Day Care Food Program Site:

# Servings Planned**	Required Components	Serving Size	Food Item and Form Used*	Amount Prepared*	Yield (svgs)**	Amount Leftover**
Monday Date:	Fruit/ Vegetable	1/2 C.				
Total:	Bread/ bread alternate	1 slice/ or 1 oz.				
	Milk/alternate	1 C.				
Tuesday Date:	Fruit/ Vegetable	1/2 C.				
Total:	Bread/ bread alternate	1 slice/ or 1 oz.				
	Milk/alternate	1 C.				
Wednesday Date:	Fruit/ Vegetable	1/2 C.				
Total:	Bread/ bread alternate	1 slice/ or 1 oz.				
	Milk/alternate	1 C.				
Thursday Date:	Fruit/ Vegetable	1/2 C.				
Total:	Bread/ bread alternate	1 slice/ or 1 oz.				
	Milk/alternate	1 C.				
Friday Date:	Fruit/ Vegetable	1/2 C.				
Total:	Bread/ bread alternate	1 slice/ or 1 oz.				
	Milk/alternate	1 C.				

* USDA required information.
** Suggested information for planning and management purposes.

THIS FORM IS PROVIDED AS A SAMPLE AND MAY BE DUPLICATED

Appendix T

Weekly Menu Production Record - A.M. Supplement

Adult Day Care Food Program Site:

# Servings Planned**	Required Components (Choose 2 of 4)	Serving Size	Food Item and Form Used*	Amount Prepared*	Yield (svgs)**	Amount Leftover**
Monday	Meat/ meat alternate	1 oz.				
Date:	Fruit/ Vegetable	3/4 C.				
Total:	Bread/ bread alternate	1 slice/ or 1 oz.				
	Milk/Alternate	1 C.				
Tuesday	Meat/ meat alternate	1 oz.				
Date:	Fruit/ Vegetable	3/4 C.				
Total:	Bread/ bread alternate	1 slice/ or 1 oz.				
	Milk/Alternate	1 C.				
Wednesday	Meat/ meat alternate	1 oz.				
Date:	Fruit/ Vegetable	3/4 C.				
Total:	Bread/ bread alternate	1 slice/ or 1 oz.				
	Milk/Alternate	1 C.				
Thursday	Meat/ meat alternate	1 oz.				
Date:	Fruit/ Vegetable	3/4 C.				
Total:	Bread/ bread alternate	1 slice/ or 1 oz.				
	Milk/Alternate	1 C.				
Friday	Meat/ meat alternate	1 oz.				
Date:	Fruit/ Vegetable	3/4 C.				
Total:	Bread/ bread alternate	1 slice/ or 1 oz.				
	Milk/Alternate	1 C.				

* USDA required information.
** Suggested information for planning and management purposes.

THIS FORM IS PROVIDED AS A
SAMPLE AND MAY BE DUPLICATED

Appendix U

Weekly Menu Production Record - Lunch

Adult Day Care Food Program Site:

# Servings Planned**	Required Components	Serving Size	Food Item and Form Used*	Amount Prepared*	Yield (svgs)**	Amount Leftover**
Monday	Meat/meat alternate	2 oz.				
Date:	Bread/ bread alternate	1 slice/ or 1 oz.				
Total:	Vegetable/fruit	______C.				
	Vegetable/fruit	______C.				
	Milk/Alternate	1 C.				
Tuesday	Meat/meat alternate	2 oz.				
Date:	Bread/ bread alternate	1 slice/ or 1 oz.				
Total:	Vegetable/Fruit	______C.				
	Vegetable/Fruit	______C.				
	Milk/Alternate	1 C.				
Wednesday	Meat/meat alternate	2 oz.				
Date:	Bread/ bread alternate	1 slice/ or 1 oz.				
Total:	Vegetable/Fruit	______C.				
	Vegetable/Fruit	______C.				
	Milk/Alternate	1 C.				
Thursday	Meat/meat alternate	2 oz.				
Date:	Bread/ bread alternate	1 slice/ or 1 oz.				
Total:	Vegetable/Fruit	______C.				
	Vegetable/Fruit	______C.				
	Milk/Alternate	.1 C.				
Friday	Meat/meat alternate	2 oz.				
Date:	Bread/ bread alternate	1 slice/ or 1 oz.				
Total:	Vegetable/Fruit	______C.				
	Vegetable/Fruit	______C.				
	Milk/Alternate	1 C.				

* USDA required information.

** Suggested information for planning and management purposes.

THIS FORM IS PROVIDED AS A SAMPLE AND MAY BE DUPLICATED

Appendix V

Weekly Menu Production Record - P.M. Supplement

Adult Day Care Food Program Site:

# Servings Planned**	Required Components (Choose 2 of 4)	Serving Size	Food Item and Form Used*	Amount Prepared*	Yield (svgs)**	Amount Leftover**
Monday	Meat/ meat alternate	1 oz.				
Date:	Fruit/ Vegetable	3/4 C.				
Total:	Bread/ bread alternate	1 slice/ or 1 oz.				
	Milk/Alternate	1 C.				
Tuesday	Meat/ meat alternate	1 oz.				
Date:	Fruit/ Vegetable	3/4 C.				
Total:	Bread/ bread alternate	1 slice/ or 1 oz.				
	Milk/Alternate	1 C.				
Wednesday	Meat/ meat alternate	1 oz.				
Date:	Fruit/ Vegetable	3/4 C.				
Total:	Bread/ bread alternate	1 slice/ or 1 oz.				
	Milk/Alternate	1 C.				
Thursday	Meat/ meat alternate	1 oz.				
Date:	Fruit/ Vegetable	3/4 C.				
Total:	Bread/ bread alternate	1 slice/ or 1 oz.				
	Milk/Alternate	1 C.				
Friday	Meat/ meat alternate	1 oz.				
Date:	Fruit/ Vegetable	3/4 C.				
Total:	Bread/ bread alternate	1 slice/ or 1 oz.				
	Milk/Alternate	1 C.				

* USDA required information.

** Suggested information for planning and management purposes.

THIS FORM IS PROVIDED AS A SAMPLE AND MAY BE DUPLICATED

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Van Egmond-Pannell, Dorothy; Patricia Brodeur; and Virginia Wilkening. *Menu Planning Guide for School Food Service,* (Revised edition). Program Aid Number 1260. Washington, D.C.: U.S. Department of Agriculture, 1983.

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ISBN	Title (Date of publication)	Price
0-8011-0972-8	California Assessment Program: A Sampler of Mathematics Assessment (1991)	$4.00
0-8011-0975-2	California Private School Directory, 1991-92 (1991)	14.00
0-8011-1023-8	California Public School Directory (1992)	14.00
0-8011-1025-4	California School Accounting Manual (1992)	12.00
	California's Daily Food Guide (brochure) (1990)*	6.00/25
0-8011-0874-8	The Changing History–Social Science Curriculum: A Booklet for Parents (1990)†	5.00/10
0-8011-0867-5	The Changing Language Arts Curriculum: A Booklet for Parents (1990)†	5.00/10
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0-8011-0777-6	The Changing Mathematics Curriculum: A Booklet for Parents (1989)†	5.00/10
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‡The *Choose Well, Be Well* series also includes curriculum guides for the other grade levels, teachers' resource manuals, a parent and community involvement resource manual, food photo cards, and color supplements. For information on ordering these materials, contact the Department at (916) 445-1260.

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